

GOVERNMENT OF INDIA

ARCHÆOLOGICAL SURVEY OF INDIA

CENTRAL
ARCHÆOLOGICAL
LIBRARY

ACCESSION NO. 49804

CALL No. 913.054705 / A.P.

NOT TO BE ISSUED

ANCIENT PAKISTAN

Bulletin of the Department of Archaeology

UNIVERSITY OF PESHAWAR

43004

VOLUME II



1965 - 66

PUBLISHED BY
THE CHAIRMAN, DEPARTMENT OF ARCHAEOLOGY, UNIVERSITY OF PESHAWAR, PAKISTAN
PRINTED AT THE PESHAWAR UNIVERSITY PRESS

11.00
72
913.054105 / A.P.

كَمْ تَرَكَوْا مِنْ بَنَاتٍ وَعُيُونٍ ۖ وَزُرُوعٍ وَمَقَامٍ كَرِيمٍ ۖ وَ
نَعْمَةٍ كَانُوا فِيهَا فَاكِهِينَ ۖ كَذَلِكَ وَأَوْرَثْنَاهَا قَوْمًا
آخَرِينَ ۖ فَمَا بَكَتْ عَلَيْهِمُ السَّمَاءُ وَالْأَرْضُ وَمَا
كَانُوا مُنْظَرِينَ ۖ

TRANSLATION

*How many were the gardens and springs they left behind,
And corn-fields and noble buildings,
And wealth (and conveniences of life), wherein they
Had taken such delight!
Thus (was their end)!
And we made other people inherit (these things)!
And neither heaven
Nor earth shed a tear
Over them: nor were
They given a respite (again).*

Surat-ud-Dukhan.

C O N T E N T S

	<i>Page</i>
<i>Editorial</i>	1
 I <i>Two Lost Inscriptions Relating to the Arab Conquest of Kabul and the North West Region of West Pakistan</i> by Dr. M. A. Ghafoor	4
 II* <i>Bara Bridge Inscription of Shahjahan</i> by Dr. M.A. Chaghatai ..	13
 III <i>Shaikhan Dheri Excavation (1963 and 1964 Seasons)</i> by Professor Ahmad Hasan Dani	17
1. <i>Introduction</i>	17
2. <i>The Mound</i>	21
3. <i>Plan of Excavation</i>	22
4. <i>Excavation Results</i>	23
5. <i>Chronology</i>	24
6. <i>Exposed Structures</i>	26
7. <i>Coins</i>	35
8. <i>Stone Sculptures</i>	38
9. <i>Terracotta Figurines</i>	46
10. <i>Inscriptions</i>	109
11. <i>Minor Objects</i>	113
12. <i>Beads and other Personal Ornaments</i> by Mr. Abdur Rehman Lecturer in Archaeology, University of Peshawar ..	121
13. <i>The Pottery</i> by Mr. Fidaullah, Lecturer in Archaeology, University of Peshawar	134
 IV <i>Personalities in Archaeology: Dr. Muhammad Abdullah Chaghatai</i> by Professor Ahmad Hasan Dani	215
 <i>Bibliography of his Writings</i> by Sahibzada Hasan Shah, Registrar Islamabad University	219

V	Reviews:	Page
1.	Louis Dupree — <i>Deh Morasi Ghundai</i> , by A. H. Dani ..	227
2.	W. A. Fairservis — <i>Archaeological Surveys in the Zhob and Loralai Districts</i> , by A. H. Dani	228
3.	J. M. Casal — <i>Fouilles de Mundigak</i> , by A. H. Dani ..	229
4.	De Cardi — <i>Excavations and Reconnaissance in Kalat</i> , by A. H. Dani	231
5.	F. A. Khan — <i>Excavations at Kot Diji</i> , by A. H. Dani ..	233
6.	J. M. Casal — <i>Fouilles D' Anri</i> , by A. H. Dani ..	234
7.	F. A. Khan — <i>The Indus Valley and Early Iran</i> , by F. A. Durrani	237

Editorial

The delay in the publication of the second volume is much regretted. The war between Pakistan and India in September 1965, deplorable as it is, threw a challenge to the Pakistani nationhood and to us as well in the way of our research and publication. We both have stood the test of time and are once again in the march to progress and to add to the common stock of human knowledge.

The war has given a great lesson to us — a lesson which was dimly visible in the geographic factors that characterise the build of the Indus system. We are so much used to think in terms of the sub-continent of Pakistan and India that we generally miss the culture - patterns which have grown in the centuries of historical unfolding in the different geographic zones. The British India of about two centuries weighs heavy on our mind and presents a picture that cuts across the perennial flow of life connecting the main theatre of activity in Central Asia with the arteries that go down the great land mass in the south. The British cut the flow at Khyber and diverted the route by sea to the English Channel. And thus the India of the British became a unit for them, and for which scholars have been busy to seek 'unity in diversity' in their studies and solitudes. The same unit, and a common standard for that unit, have overshadowed the writings of all those historians who confine themselves within this geographic horizon. But archaeologists are bringing forth materials every day to show the varying standards that hold good for the different zones.

For us, who are sitting at the very gate of Khyber and hearing the knocking sound every day, there is a wider link beyond and the limitations of the sub-continent have no meaning, as never in the past history has there been any such insular concept for those who lived in the Indus Zone. This geographic zone forms, no doubt, a unit of the Indus pattern, but is flung athwart those hilly ranges that go down from the Pamir knot to the Arabian Sea, and thus the zone has been in living contact not only with the Indian system but also with those of China, Central Asia and the West. We are no more a part of India than that of these other areas. We share in the common burden of humanity and march through the time towards the common goal of progress.

It is this wider world contact that lies at the root of the archaeology of Pakistan. The archaeological problems here are not just local. They have deeper meaning and wider relationship. Whether one is interested in the stone age cultures of the Soan valley, or one seeks after the buried cities and villages of the Bronze Age in the deserts of Sind and Baluchistan, or one braves through the hill ranges west of the Indus in search of the derelict remains of the by-gone Aryans, Greeks, Scythians, Parthians, Kushanas, Huns and many others whom we know not yet, we place our hand at the pulse of humanity. When we unearth the remains of any one of them and try to build up the

cultures represented by them, we are at once catching the throbs of man and trying to build around us a world of human forces that have moved in and out. Any period of the archaeology of Pakistan has a greater story to tell having a wider importance for the history of man.

The so-called "Frontier"—a term invented by the British for Peshawar region because of their territorial limit on this side—is meaningless in the long span of history. It is a region where several historical forces have impinged upon one another and have left their traces on the peoples that followed. Yet it is a land of great contrasts—soaring hills looking down with greedy eyes on small river valleys—a pattern that has maintained tribal groups in their love of freedom and economic poverty. Whether the by-gone Aryans or the present-day Pathans—both present a similar social picture within a frame of sculptured hills, barren and bleak.

The river Indus — the *Abasin* of the Pashto language — is the real 'Father' of the land, which we now call Pakistan. It not only makes for unbreakable bond of unity in the country but is also a great nourisher and sustainer of the teeming millions that live to drink its cool refreshing water. It is the river — *Sindhu* — of Pakistan.

The trans - Indus system is the piedmont region of Pakistan where the hills merge into the plateau of Pothwar, which is further characterised by a dry and dreary Salt Range, separating the hill Zone of the north from the desert of the Cis-Indus belt. The northern area has been a meeting point of several moving tribes, and it is here that the famous city of old, Taxila, is situated on the west of the Margalla Range. On its east lies Islamabad, the present capital of Pakistan. This system extends upto the river Jhelam, the Hydaspes of the Greeks, which rises and winds through the beautiful vale of Kashmir, hung again around the upper reaches of the Indus.

Beyond the river Jhelam spread out the alluvial flats of the Panjab — (irrigated by) Five Rivers — the granary of Pakistan. To its south stretches the delta of Sind beyond the hill of Rohri — Alor or Al-Ror of the Arabs — a lime-stone formation including flint nodules — branching out from the Sulaiman Range towards the desert of Rajasthan on the west. Above Rohri is the junction of five rivers with the Indus and a little beyond is the city of Multan, the ancient *Malava-sthana* (the Land of the Malloi tribe), where routes converge from the west coming along Gomal or Kurram valleys. It is in the river valleys of the Panjab and the deltaic Sind that civilizations have grown and flourished. West of Sind beyond the Kirthar Range is the upland of Baluchistan through which pass several routes westward to the ancient civilizations of the Orient. But it is a transition zone, dry and dreary, serving only as a poor communication line, so well experienced by Alexander the Great on his return march to Babylon. But the zone passes imperceptibly into the great Iranian plateau.

Eastward the fertile land of civilization is bounded by the desert of Rajasthan, which spreads like an arc of a circle and approaches the Panjab from the south. The north is defined by a range of the Himalayas, which sweeps south-eastward only to leave a gap for the great divide between the systems of

the Indus and the Ganges. It is this gap which bears the historical *Kurukshetra*, the battle-fields of Panipat and Tarain, which in history have decided the fate of India. It is along the same direction that the recent war was fought between Pakistan and India.

Whatever may be the future course, the country has come to understand its deeper foundations rooted in the long historical perspective — a perspective that has shed new light on its present status and, much more than that, in its new relation with the wider humanity. When we are digging in a corner of Pakistan, we are touching a chord of this human relationship. Its tune is bound to affect the historical movements of the world. On our part we are at the dig to discharge our responsibility — to lay bare the remnants of civilizations that humanity has left over the ravages of time. In this field of reconstruction and realization, we hope, we have the goodwill of all and cooperation of all those who believe in the common destiny of man.

February 1, 1967.

AHMAD HASAN DANI.

Two Lost Inscriptions Relating to the Arab Conquest of Kabul and the North West Region of West Pakistan

by

DR. MUHAMMAD ABDUL GHAFUR

The eastern borderland of the Arab Caliphate is ill recorded in history. The early activities find mention in the accounts of Tabari and Al-Baladhuri. But their reference to the local Hindu rulers is vague. They speak of Kabul Shah, a Ratbil and a second Ratbil. The Hindi sources are utterly silent. Dr. R. C. Majumdar attempted a reconstruction of the history from the Hindu angle on the basis of the Arab sources read in the light of the geographical information given by the Chinese traveller Hiuen Tsang. Off and on number of coins of the Hindu Shahi rulers of Ohind have been published. In the new summary given by Sir Olaf Caroe in "THE PATHANS" the question is again raised about the Kabul Shah and the Hindu Shahi ruler and it is suggested that the latter kingdom was founded in A.D. 870 after Kabul was captured by Yaqub ibn Laith. But as Sir Olaf Caroe admits, the Hindus still continued to hover round Kabul even after this date. In this confusion it is refreshing to get more light on the contemporary scene from two inscriptions which are commented here by Dr. M. A. Ghafur, Superintendent of Archaeology, Government of Pakistan, Karachi.

Recently there has been discussion on the first Muslim invasion of the North West Frontier of the sub-continent¹. Dr. Dani has thrown fresh light on this obscure period of the history by editing Tochi Valley inscriptions. He strikes at the root of the problem when he says "early Muslim Conquest of this region still remains to be authenticated. More and more evidence remains to be gathered by a thorough exploration of this region"². The force of his arguments is evident to those who are well acquainted with the original source of history. The systematic dig in the original sources and the evaluation of sources are of prime importance for the historian of this region. Mere speculation on the basis of secondary sources or sheer credulance to source statements without a critical judgement will only darken the dim period of our history.

Two inscriptions, noticed here, are recorded by Abu-al-Walid Muhammad b. 'Abd Allah b. Ahmad al-Azraqi in his famous work *Akhbar Makka*, the

1. For detail see, R C. Majumdar, *The Arab invasion of India*, Dacca University Supplement Bulletin No XV; S Q. Fatimi, First Muslim invasion of the North West Frontier of the Indo-Pakistan sub-continent, *Journal of the Asiatic Society of Pakistan*, Vol. VIII No. 1, 1963. K A. Rashid, same title, *ibid*, No. 2, 1963.
2. Ahmad Hasan Dani, Tochi Valley Inscriptions in the Peshawar Museum, *Ancient Pakistan* Vol. 1, Peshawar 1964 PP. 125-135.

earliest existing book on the history of the city. They bear direct evidence to the Arab Conquest of Kabul and the North West Frontier. The historical data provided by these inscriptions are so original and authentic that they call for serious attention by the historians of the sub-continent.

Wustenfield was the first to edit *Akhbar Makka* with a learned introduction dealing with the biography of the author and the scope of the work as a source of history¹. Historians and Bibliographers such as Ibn-al-Nadim in *Fihrist*, Fasi in his work *al-'Aqd-al-Thamin fi Tarikh al-Balad al-Amin*, al-Hajj Khalifa in *Kashf al-Zunun*, and Shams al-Din Muhammad b. Umar al-Maghribi al-Tunisi in *Kitab Dastur al-A'lam* have noticed Azraqi's *Akhbar Makka* but ascribed different dates to the work. On the basis of internal evidence Wustenfield dates the completion of *Akhbar Makka* to 244H/858². Recently Rushdi al-Salih Mulhasan corrected Wustenfield's in many respects, particularly the text of inscriptions, the subject matter of our present discussion³.

While compiling the history of Makka Azraqi not only recorded the legends and tradition associated with the city but also left us a description of ancient remains in the city. He recorded with fair accuracy all that he observed in Makka. He saw the inscription tablet himself inside the Ka'ba and transcribed the inscription in his book *Akhbar Makka*. Unfortunately Azraqi has not properly described the throne. He simply says that لوح or 'tablet' of the throne was incised with the inscription. In classical Arabic the word لوح signifies *inter alia* a tablet of wood or ivory. The throne may be either of wood or ivory. As to the technique of inscription it appears from the description of Azraqi that it was incised and not carved in relief⁴.

Following is the text of the Ist inscription as recorded by Azraqi:-

نسخه ما في اللوح الذي في جوف الكعبة الذي كن مع السرير

بسم الله الرحمن الرحيم

امر عبد الله الامام العاظمون امير المؤمنين اكرمه الله ذا الرياستين الفضل بن سهل بالبعثة بهذا السرير من خراسان الى بيت الله الحرام في سنة مائتين و هو سرير الاصهيد كابل شاه بعد مهراب بني دومي كابل شاه المحمول تاجه الى مكة المعززون سريره في بيت مال المسلمين بالمشرق في سنة سبع و تسعين و مائه و من بنا امير الاصهيد انه اضعف عليه الخراج والفدية عن بلاد كابل والقندهار و نصب العناير و بنت المساجد فيها و خرج الاصهيد كابل شاه نازلا عن سريره هذا خاضعا لله مسلما حتى حاول حدود كابل و ارض الطخارستان و وضع يده في يد صاحب جبل خراسان ذي الرياستين على ما ساه ذوالرياستين من خطه الذل للدين ولامام المسلمين ثم اقام البريد من القندهار الى البابان و اضاف بلاد كابل والقندهار الى بلاد خراسان و اذعن للوالي مع الجنود مقيما حدود الله والاسلام عاملا باحكامه فيه و في من اخنار الاسلام معه و اقام على العهد في مملكته و سرالامام اكرمه الله الرانات اخضر على بنى ذي الرياستين الى القتيير و في ناحية التبت ما سرها فانه الله سبحانه على نو خان و راور بلاد بلور صاحب جبل خاقان و جبل

1. For detail see, Azraqi, *Akhbar Makka* edited by Wustenfield, Leipzig, 1858.

2. *Ibid*, P. 10-25.

3. Azraqi, *Akhbar Makka* part I edited by Rushdi al Salih Mulhasan. Matba al Majdiya, Makka, 1352/1933.

4. *Ibid*, P. 149.

التبت وبعث به الى العراق مع فرسان التبت ومن ناحية التبريد ما طلب على باراب و شاوغر و زاول و بلاد اطراز و قتل قائد الثغر و سبا اولاد جيجويه الخزلجى مع خابوناته بعد احجازه اناه بيلاد كيماك و بعد غلبه ما غلب على مدينه كسان و بعث بمفاتيح فلاح فرغانه الى العرب فمن قرا هذه السطور فليعن على نغراالاسلام و نذليل الشرك يقول او فعل فان ذالك واجب على الناس تغيير الدين اذا قام به لانتمه و من اراد انزعج و الجهاد و ابواب البر والمعاونه على ما بكسب الاسلام كهذا العزو هذه المناخر و قد نسخنا ما كن حضر على صفحه ناج مهرب بنى دومي كابل شاه فى سنة سبع و تسعين و مائه على هذا النوح و من نصر دين الله نصره الله انقلبه تبارك و تعالى و لينصرف الله من نصره ان الله لقوى عزيز -

و كسب الحسن بن سهل صنوذى الراسين فى سنة مائتين -

TRANSLATION:

The text that is (inscribed) on the tablet which was along with the throne (located) inside the Ka'ba.

In the name of Allah, the Merciful and the Gracious.

'Abd Allah, Al-Imam, Al-Mamun, Amir al Muminin (may Allah increase his honour) has ordered Dhu al-Riyasatain-al-Fadal-bin-Sahal to send this throne from Khurasan to Ka'ba, the House of Allah in the year two hundred. This is the throne of Ispahbad Kabul Shah (after ?) Muhrab Bani Dumi, Kabul Shah whose crown was carried to Makka and whose throne was deposited with the Bait al Mal of the Muslim in the East in the year 197. And that Ispahbad was ordered that the *Kharaj* and *Fidya* on account of the cities of Kabul and Qandahar was doubled.

And that the pulpits were set up and the mosques were built in these cities. And Ispahbad Kabul Shah stepped down from this throne as a mark of submission and obedience so that the boundary of Kabul and Tukharistan turned (Muslim possession). And he submitted himself to Dhu-al Riyasatain who turned him away with disgust from the state of humiliation to the faith and the Imam al-Muslimin. Then the postal service was established between Qandahar and Bamiyan. The cities of Kabul and Qandahar were annexed to the kingdom of Khurasan and he (Kabul Shah) became submissive to the the Wali or Governor along with the army establishing statute of Allah and Islam, executing the law of (Allah) in it and among those who accepted Islam with him and stood by the covenant in his kingdom. The Imam (may Allah increase his honour) caused the green flag¹ travel on the hands of Dhu al-Riyasatain in Kashmir and in the areas of Tibet. Allah has made him victorious in Bukhan and Bilor and over the rulers of Jabal Khaqan and Jabal Tibet and he was sent with the cavalry of Tibet to Iraq. From the area of Turbad all that was demanded was *Barab*, *Shawgar*, *Zawal* and the kingdom of *Atraz*. The border leader was killed, the children of *Jahguya* al-Khizlasy along with his wives were taken captive after he was stoned at the city of Kimak. Then he won victory in the city of Kasan and he sent the keys of the forts of Farghana to the Arabs.

1. The Abbasid flag was black. But for sometime Mamun took the green flag for political reason.

Whoever reads these lines, should render assistance for the grandeur of Islam and for the lowering down of disbelief with words or deeds. It is indeed incumbent upon all to gratify the cause of Islam when the Imam stands by it. Whoever seeks renunciation, Jihad and the door of piety and the assistance in all that Islam achieves, lo! this is the might and these are the glories. We have transcribed which was incised on the plates of the crown of Muhrab Bani Dumi Kabul Shah in the year one hundred ninety seven. Allah helps him who helps the faith of Allah as He the Exalted and High said, Allah must help those who help Him. Verily Allah is strong and powerful."

A systematic commentary on the above will call for the combined efforts of a Turkologist, an Indologist and an Arabist. The present writer therefore proposes to confine the commentary to the part of the inscription which concerns Kabul and North Western areas of Hind-Pakistan sub-continent.

First of all it has to be examined whether the whole text quoted by Azraqi forms part of the inscription. The comparative study of the protocol formula of the official inscription of Mamun's reign and the internal evidence of the quoted text make it clear that while transcribing the text of the inscription, Azraqi interpolated some historical information with a view to throwing light on the text of the inscription. The phrase (ومن بنا) , or 'there is a report' is a clear pointer to that fact. As such the text of the inscription stands as follows:-¹

بسم الله الرحمن الرحيم - امر عبد الله الامام الحامون امير المؤمنين اكرمه الله ذالرباستين الفضل بن سهل بالبعثه بهذا السور من خراسان الى بيئاته الحرام في سنة مائتين و هو سربرا الاصفهيه كابل شاه بعد مهرباب بنى دوسى كابل شاه انجمول تاجه الى مكه المخزون سريره فى بيت مال المسلمين بالمعشرف فى سنة سبع و تسعين و مائه و كتب الحسن بن سهل صنوذى الرباستين فى سنة مائتين -

The study of the text of the above inscription shows variations in the name of Kabul Shah in different manuscripts of *Akhbar Makka*. Thanks to the editors who recorded the variation, we are in a position to find a clue to the restoration of the correct reading. As copyists were unfamiliar with Sanskrit names, they seemed to have made an Arabic word out of a Sanskrit name. The name occurs as مهرباب which means flight or مهرباب. Preceding the name, the word بعد was inserted by the copyist to make the word meaningful. In this context مهرباب appears to be a transcription error of the word مهراب or emperor. The part of the name which follows it is بنى دوسى. If we eliminate the diacritical marks in the words, it admits the reading پتى درمى or پنى دوسى (Pathi Dharmi or Pathi Dhami). The correct decipherment of the name is still an open question. We hope Indologists² will come forward to solve it in due course. Another transcriptional blunder is the date portion سبع و تسعين و مائه. Here سبع is a mistake for تسع as the second inscription, which we are going to discuss, bears the correct transcription of the date. As we know, the mistake of سبع for تسع or vice versa is not

1. For English translation see above.

2. The correct restoration of the original Sanskrit name is not possible. But پتى درمى could better be restored as *Pati Deva*. If this is acceptable, in the first word مهرباب we may recognise *Spala*, meaning *Spada*, i.e. army. Thus we get the proper word *Spalapati Deva*, Lord of the army, a regal title found in the coins of this period in this region. Again in Aspahabad we may recognise *Asvapati*, meaning 'Lord of horseman'. — Editor.

uncommon in Arabic. The historical sequence of events also proves it beyond doubt that it is a transcription mistake.

The inscription gives the following historical information:-

1. The Caliph Mamun ordered his Wazir Fadal b. Sahal to send the throne of Kabul Shah from Khurasan to Ka'ba in the year 200 H/A.D. 815.
2. That the throne was first deposited with the Bait-ul-Mal of the east i.e. Khurasan in the year 199 H/A.D. 814-15.
3. Kabul Shah was defeated by Mamun in the year 199 H/814-15.
4. The crown of Kabul Shah was sent to Ka'ba without being deposited with the Bait-ul-Mal of the east in Khurasan in the year 199H/A.D. 814-15.
5. The inscription was written by Hasan b. Sahal, the brother of the Wazir of Mamun in the year two hundred (A.D. 815-16).

The early conflict of the Arabs with the non-Muslim rulers of Kabul and Zabul need not detain us here¹.

As regards the relation of Mamun with Kabul Shah we know that the Kabul Shah was preparing to invade the border area of Khurasan in A.D. 811² at a time when the unity of the Caliphate was at stake on the issue of succession, and the stage was being set for civil war between Mamun and Amin, the contestants for the Caliphate. Fadal b. Sahal, the Wazir of Mamun, advised Mamun to make peace with Kabul Shah. Political situation compelled Mamun to pacify the Kabul Shah. The military campaign against Kabul Shah was launched in 199/814-15, the year of Mamun's victory over Amin.

The information provided by Azraqi for the purpose of illuminating the text of the inscription is in itself of great historical importance. We have shown that Azraqi completed his work in 244 H/A.D. 858. and as such he was almost contemporary with the reign of Mamun. In this context Azraqi is the earliest historian who has left us information on the history of this region and the information given by him is original and authentic. The significant point contributed by Azraqi is that Kabul Shah was not only converted to Islam but the whole kingdom of Kabul Shah became a part of eastern caliphate during the reign of Mamun. The law of Islam was operative in the kingdom of Kabul Shah. Barid or postal service was established between Qandahar and Bamiyan. The green flag of the Abbasids reached as far as Kashmir³. We know that the kingdom of Kabul Shah extended from Hindu Kush mountains to the Bannu district and included the famous cities of Kabul, Jalalabad and Peshawar⁴. Thus it is clear that the kingdom of Kabul Shah, extending from the frontier of Bamiyan on the west to the river Indus on the east, came under the political subjugation of the Abbasids under Mamun. The invasion of Kashmir as referred to by Azraqi can also be ascertained from

1. For detail, see R. C. Majumdar, *op. cit.*
 2. Bartold, *Turkistan Down to Mongol Invasion* P. 702
 3. See the Arabic text and translation, above.
 4. R. C. Majumdar, *op. cit* P. 7

the Hindu evidences. Kalhana's *Rajatarangini* bears reference to Mamun on several occasions. The name Mamun occurs once as having been three times defeated by Lalitaditya who became a legendary figure for his military exploits. Again it is mentioned in connection with King Jayapida¹. Since the chronology of Kalhana is absolutely unreliable and his sources are untraceable, it is quite obvious that the events are generally exaggerated and in some cases misplaced. The only workable method is in these circumstances to establish the chronology of these events with the help of an Arab historian. The evidence borne by Azraqi shows that Mamun launched a military campaign to Kashmir in 199/814-15. If we collate the statement of Kalhana with that of Azraqi we come to the conclusion that the war of Mamun with Kashmir took place during the rule of Lalitapida who was contemporary with Mamun and it was not during the time of Lalitaditya as mentioned by Kalhana. Lalitaditya was ruling over Kashmir by the middle of 8th century A.D. Moreover it appears that there was an alliance between Kabul Shah and the ruler of Kashmir and probably they made a joint front against the Abbasids and perhaps this emboldened the Kabul Shah to invade Khurasan when Mamun was engaged in civil war against his brother Amin. In the context of Azraqi's text Kashmir is used as a denomination of a kingdom. It is quite likely that the Muslim army after defeating the Kabul Shah crossed the upper Indus at certain points and entered into the Panjab which was then a part of the Kashmir kingdom. Mamun's expedition to Kashmir may be taken as a retaliatory measure for the support given by the ruler of Kashmir to Kabul Shah in his aggressive design on Khurasan.

Following is the text of the second inscription as recorded by Azraqi².

نسخه ما كان كتب على صحيفه التاج

بسم الله الرحمن الرحيم

امرالامام المأمون اميرالمؤمنين اكرمه الله بحمل هذا التاج من خراسان و تعليقه في الموضع الذي علق فيه الشرطان في بيت الله الحرام شكر الله عز وجل على الظفر بمن غدر و تجيلا للكعبة اذا استخف بها من نكت و حال عما اكد على نفسه فيها و رجا الامام عظيم الثواب من الله عز وجل بسده الثلثة التي اخترمها المخلوع في الدين فانه قد كان جريئا على الغدر والاستخفاف بما اكد في بيت الله عز وجل و حرمة و تسوخي الامام تذكير من تنفعله الذكرى لبزبدهم به نقبنا في دينهم و نعظيما لبيت ربهم تحذيرا لمن استخف و تعدى فانما علقنا هذا التاج بعد غدر المخلوع و اخراجه الشرطين و احراقه اباهما فاخرجه الله من ملكه بالسيف و احرق محلته بالنار عبرة و عظمة و عقوبة بما كسبت سداه و ما الله بظلام للعبيد و بعد عقد الامام المأمون اكرمه الله بخراسان لذي الرياستين الفضل بن سهل و توليته اباه المشرق و بلوغ الرابعة السوداء بلاد كابل و نهر السند و نصير مهرب بنى دومي كابل شاه سرده و تاجه على يدي ذي الرياستين الى باب الامام المأمون اميرالمؤمنين و اسلام كابل شاه و اهل طاعته على يدي الامام بمر و فامر الامام جزاه الله عن الاسلام والمسلمين خيرا ثمروه من الائمة المهديين ان يدفع السرير الى خزان بيت مال المسلمين بالمشرق و بعلق

1. Kalhana, *Rajatarangini*, English translation by M.A. Stein, Vol. I, published by Motilal Banarsidas, Delhi, 1961, Book III, 334-5.

2. Azraqi, op. cit. P. 160-61.

التاج فى بيت الله الحرام بمكة وبعث به ذوالرياستين و الى الامام على المشرق و مدير خيوله، و صاحب دعوته بعد ما اجتمع المسلمون على طاعة الامام العائمون امير المؤمنين اكرمه الله و وفواله بوفائه بعهد الله و اطاعوه بتمسكه بطاعه الله عزوجل و كانوا يعملون بكتاب الله و احيائه سنة رسول الله صلى الله عليه وسلم و رؤايه من المخلوع لغدره و نكثه و تبديله فالحمد لله رب العالمين معز من اطاعه و مذل من عصاه و رافع من وفى و واضح من غدر و صلى الله على محمد النبى و آله و صحبه و سلم ، كتب الحسن بن سهل صنوذى الرياستين فى سنة تسع و تسعين و مائه-

TRANSLATION

The Text which is written on the plate of the Crown.

“In the name of Allah, the Merciful and Gracious. Imam al-Mamun Amir al-Muminin (may Allah increase his honour) ordered to carry this crown from Khurasan and to suspend it in the place where two covenants were hung in the House of Allah, the Mighty and the Great, on the victory against the one who betrayed and as a mark of honour to Ka’ba. He became dishonoured at Ka’ba, who broke the covenant and turned away from that which was taken upon himself. And the Imam expects a great reward from Allah, the Mighty and High, for His stopping the breach which the deposed committed in the faith. Verily he was bold in betrayal and dishonour of what it was affirmed in the House of Allah, the Mighty and High, and in His Haram or the sacred (*Ka’ba*). The Imam preferred to remember (whose remembrance brings in beneficence) as a mark of respect for the House of their Lord and as a warning to those who dishonour and exceed the limit. We have suspended this crown after the betrayal of the deposed who ousted the two covenants and burned them. Allah has ousted him from the kingdom with the sword and caused his place to burn with fire as a warning, example and as consequence of that which he earned. Allah does not do injustice to His creature. Imam al-Mamun (may Allah increase his honour) after having assigned the affairs of Khurasan to Dhu-al-Riyasat al-Fadal b. Sahal and the governorship of the east to him, the black flag being reached in the kingdom of Kabul and the river Indus, Muhrab Bani Dumi’s throne and the crown being surrendered at the threshold of Imam al-Mamun, Amir al-Muminin and having attained the submission of Kabul Shah and his subjects to the Imam at Merv, the Imam (may Allah reward him for his service to Islam and the Muslims) ordered to send the throne to the *Bait al-Mal* of the Muslims in the east and to suspend the crown in the House of Allah, the sacred, at Makka. And it was sent with Dhu al-Riyasat, the *Wali* of the Imam for the east and the Chief of army and the leader of the propagation. It was after that the Muslims united on the obedience to Imam Mamun (may Allah increase his honour) and they fulfilled to him the pledge of Allah and obeyed him on account of his holding fast to the obedience of Allah, the Mighty and High. They followed him on account of his acting according to the Book of Allah and because of his reviving the Sunnah of the prophet. On account of him (the Caliph) they became free of the deposed and his betrayal, breach and alteration. All praises belong to Allah, the Lord of Universe. Honoured is one who obeys Him (Allah) and humiliated is one who disobeys Him. Whoever fulfills (the pledge) became high and whoever betrays became humble. Peace of Allah be on Muhammad the Prophet and his family and his companions.

Hasan b. Sahal, brother of Dhu al-Riyasatayn wrote it in the year one hundred and ninety nine”.

The study of the text shows that Azraqi, copied the inscription as it was found on the plate of the crown. There is no indication of interpolation by the author. The inscription gives us the following historical information:-

1. The crown of Kabul Shah Muhrab Bani Dumi or Maharaj Pathi Dhami was presented to Caliph Mamun by his Wazir Fadal b. Sahal as a mark of victory.
2. Kabul Shah presented himself with his followers to the Caliph Mamun at Merv and accepted Islam in the presence of the Caliph.
3. The black flag of the Abbasids was hoisted in Kabul and the river Indus.
4. Mamun ordered to send the crown of Kabul Shah to Makka and hang it in the Ka'ba at a place where the two covenants (nominating double succession of Amin and Mamun by Harun al-Rashid) were hung and later on Amin destroyed them.
5. By displaying the crown publicly at the sacred Ka'ba, Mamun wanted to focuss his victory on Kabul and the North West Frontier area of the sub-continent as one of his greatest achievements for the cause of Islam and the Muslims.
6. Mamun attached so much importance that his Wazir Fadal b. Sahal was deputed to carry the crown for display at Ka'ba.
7. The inscription was written by Hasan b. Sahal in the year one hundred and ninety nine”.

The mention of نهر السند in connection with the defeat of Kabul is noteworthy. The hoisting of black flag at the river Indus as stated in the inscription deserves serious consideration. The lower Indus including Multan was a part of the Islamic kingdom since the early 8th century A.D. It was therefore evident that the army of Mamun crossed the upper Indus at certain points and entered into the Panjab which formed a part of Kashmir kingdom¹.

The inscription on the crown of Kabul Shah executed by the order of Mamun and drafted by Hasan b. Sahal is a document which holds out the political manifesto of Mamun after his final victory in the war of succession with his brother Amin. The two covenants mentioned in the inscription are known in the history as Makkan documents which settled the double succession of Amin and Mamun during the life time of Harun al-Rashid. Amin introduced the name of his son Musa in Ka'ba and as such violated the Makkan documents. Mamun had virtually sovereign control over the eastern half of the Caliphate and made Merv his capital. Armed conflict started in 195/811 and after protracted war it ended in the final victory of Mamun

1. The wording of the inscription does not prove that Mamun's army crossed into the Panjab. Black flag was hoisted on the Indus. Could it not be at Al-Ahwar (modern Lahore in Swabi Tahsil) on the Indus — a place which was earlier occupied by Muhallab ibn Abi Sufrah? — Editor.

in 198/September, 813¹. A year later when he was free from all resistance Mamun conducted a large scale military operation against Kabul Shah and his ally, the ruler of Kashmir, and won an unprecedented victory.

He made this victory a prestige issue and found in it a plea to project his case in the nerve centre of Islam the Ka'ba by way of displaying the crown of the defeated non-Muslim king at a place where "Makka Documents" were hung. With full royal protocol the crown was sent to Ka'ba. The significance of such unusual importance to this event can be understood only when we take into view the gathering momentum of non-Islamic forces against the Abbasids. The rulers of Kabul and Kashmir seem to have made a united front against the Muslims. As we have seen, they assumed a threatening attitude to the security of the eastern Caliphate. In this perspective Mamun's victory is indeed a great landmark. Secondly although Mamun won the war of succession he was not liked by the Arabs as he leaned on the support of the Iranians. Probably he wanted to make it an occasion to glorify his services to the cause of Islam and to condemn Amin for violating the agreement settled at Ka'ba and thus win the sympathy of the Arabs.

Finally we may recall here the oft cited Memoir of R.C. Majumdar who concludes:- "The fruitless efforts of half a century (A.D. 649-700) convinced the Arabs that the conquest of these territories was beyond their power. Henceforth they were glad to leave them alone and merely sought to impose some sort of suzerainty upon them. But even this was with difficulty maintained for a very brief period (A.D. 700-14). For the next century and a half, Kabul and Zabul maintained their authority practically unimpaired. The Abbasid Caliphs, no doubt, occasionally exacted some tributes from them, but with the exception of this and occasional raids, Kabul and Zabul were left undisturbed till the former was conquered by Yakub, son of Lais, in A.D. 870".

The study of the two inscriptions of Mamun discussed above have completely demolished the established notion of the historian. The epigraphical evidence and historical information provided by Azraqi prove beyond doubt that the whole kingdom of Kabul Shah was not only overrun by the Muslim army but also became a part of the eastern Caliphate during the rule of the Abbasid Caliph Mamun (813-833 A.D.).

1. For detail see F. Gabrieli, under 'Amin' *Encyclopaedia of Islam*, New Edition, Vol. I. P. 437-38.

II

Bara Bridge Inscription of Shahjahan

by

DR. MUHAMMAD ABDULLAH CHAGHATAI

The fabulous ancient city of Peshawar has not received due attention by the historians and archaeologists. On the evidence of the Chinese pilgrims' accounts the city is claimed to have been the capital of the Kushanas particularly after Kanishka. His famous stupa was excavated by Dr. D.B. Spooner but, except for its relic casket preserved in the Peshawar Museum, nothing remains of the stupa and the nearby monastery. No attempt has been made to locate the site of the royal palace and other buildings. Though Peshawar continued to be an important city in the succeeding changes of dynasties, still the remains above ground are few and far between. The destruction was no doubt caused by a series of invasions that lay their ruinous hands on the city. Its history is a challenge to the archaeologists who may find tit-bits here and there to catch the thread and weave a story of man that placed his foot on the soil of Peshawar. Here we have a Persian inscription edited and commented upon by Dr. Abdullah Chaghatai (for his biography see below) — the inscription which originally belonged to a bridge on the river Bara, on which the city of Peshawar originally stood. Since 1872 the river has shifted its course.

We reproduce here an important inscription (Pl. II No. 1) in Persian verse, which is preserved in Peshawar museum¹. It mentions the construction of a bridge in Peshawar during Shahjahan's reign while Nawab Lashkar Khan was the governor of this area. The Persian text is engraved on a marble slab in standard style of calligraphy and it measures 28x36 inches. Though this marble slab has been badly damaged in the course of time yet the Persian text can easily be deciphered as noted below:

شاه جهان پادشاه غازی

بمعداته که از فضل الهی	بغای خیر عالی کرد بنیاد
محب اهل دل عبداللطیف آنکه	ن کد مثلش مادر ابام کم زاد
نفس بنیاد سرد اندر سناور	خا الهی تا جهان باشد بما ناد
نی تاریخ انعامش مهندش	لشکر بگفتا خبر جاری بساد اباد

(۱۰۳۹)

1. The Photograph of the inscription is published here by the courtesy of the Peshawar Museum. The text and its translation were published in *Peshawar - Past and Present*, by S. M. Jafar, Peshawar, 1945 pp 14-15 and 153.

در عهد سلطنت حضرت ظل سبحانی صاحبقران ثانی در ایام حکومت نواب لشکر خان
باهتمام بنده رب و دود داؤد بن ابومحمد قریش مہمنت اتمام یافت -

TRANSLATION

"Praise be to Allah, that by the Divine grace, laid the foundation of the grand auspicious building.

The friend of the generous, Abdul Latif, like whom the world has never produced,

Founded the bridge in Peshawar. O! God! endure it as long as the world lives.

For the sake of chronogramme of its completion, *Muhandis* (engineer) said: May this existing auspicious construction perpetuate for ever (which yields A. H. 1039/A. D. 1629).

During the reign of the kingdom of His Majesty, the shadow of Almighty God, Sahib Qiran Thani (Shahjahan), and the tenure of the jurisdiction of Nawab Lashkar Khan, and under the management of slave of the loving Lord, Daud, son of Abu Muhammad Qureshi, reached its auspicious completion."

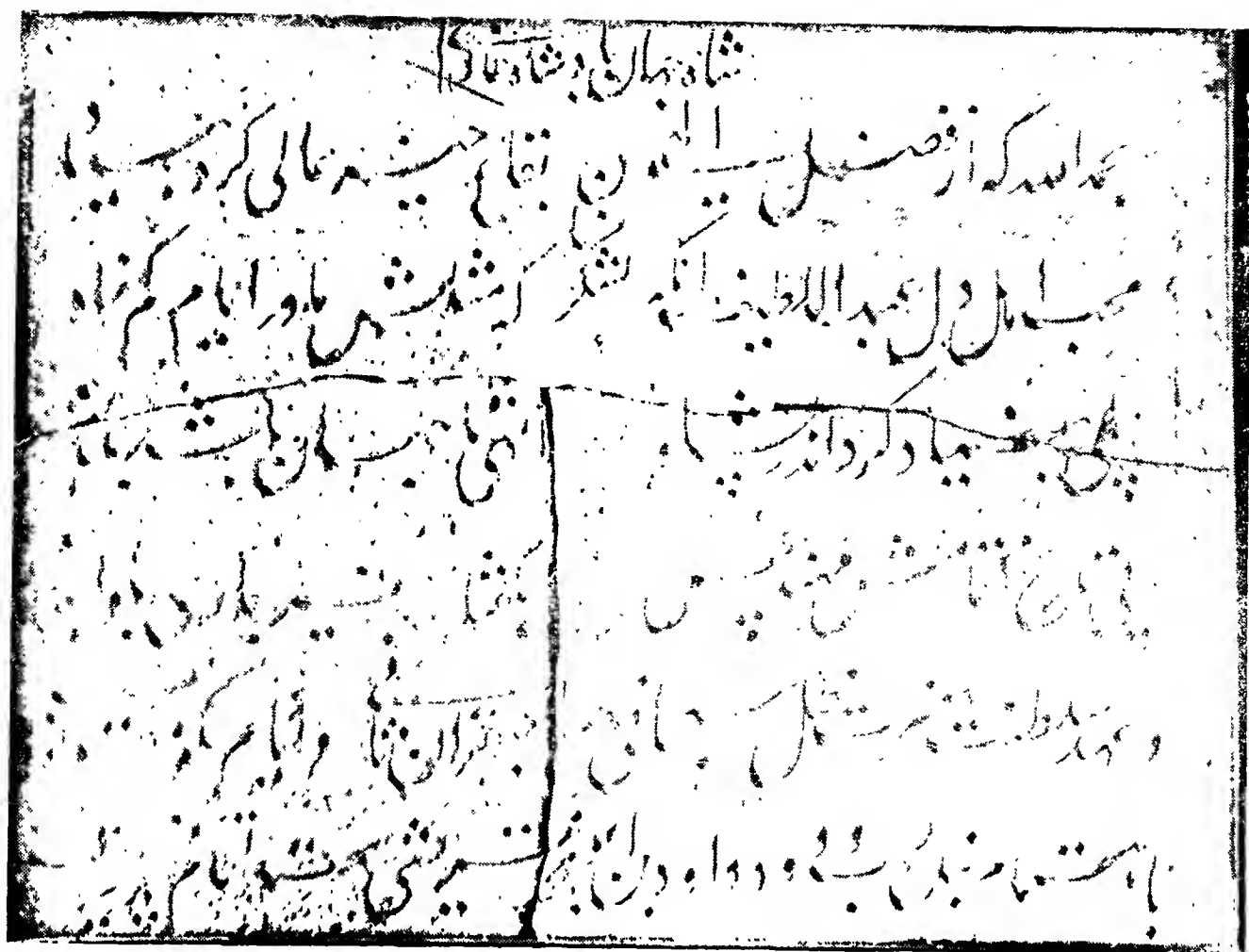
The following points are quite clear from the above noted inscription:

1. The bridge was built during Shahjahan's reign in A.D. 1619.
2. Abdul Latif founded the bridge in Peshawar.
3. The poet having his *nom de plume* *Muhandis* (engineer) composed this chronogrammatic Persian verse of the inscription which shows that the bridge was built in A.H. 1039/A.D. 1629.
4. The bridge was built in Peshawar, while Nawab Lashkar Khan' was the governor of this area.
5. It was built under the management of one Daud, son of Abu Muhammad Qureshi.

In the light of contemporary history the above noted points are expounded below:

1. Emperor Shah Jahan ascended the throne in A.H. 1037/A.D. 1627, after the demise of his father Emperor Jahangir while the Mughals were already at war with the Afghans².
2. Abdul Latif, who founded the bridge, was one of the important officials of Shahjahan's reign. According to *Amal-i-Salih*³ he was appointed by Shahjahan as an administrator (*Dewan*) of civil and revenue affairs in place of Rai Mani Das, during the fifth regnal year. Although Mulla

1. The name of Nawab Lashkar Khan occurs in the text of the inscription between its verses instead of in the last but one line after the word *Nawab*
2. Mulla Muhammad Salih Kambo, *Amal-i-Salih or Shahjahan Nama* ed. by Ghulam Yazdani, Calcutta 1923-1939. Vol. I. pp. 165 esq., 477 esq.
3. *Ibid*, Vol. I pp. 513-14.



No. 1. Bara Bridge Inscription



No. 2 Dr. M. Abdullah Chaghatai (b. 1896)

Abdul Hamid mentions in his *Badshah Nama* that Rai Mani Das, owing to old age was relieved of his office and in his place Mulla Abdul Latif of Gujrat was appointed¹. Fortunately Mulla Muhammad Salih discusses in the course of the learned persons of Shahjahan's reign under an independent sub-head that one Abdul Latif Gujarati Lashkar Khani² who was formerly incharge of the affairs of Lashkar Khan Mashhadi, after leaving his services, was entrusted with the office of the administration of civil affairs of the state. He was also conferred the title of Aqidat Khan along with the rank of one thousand four hundred infantry during the 11th regnal year. But later on owing to the prevalence of his illness he handed over this charge of the Dewan to Dyanat Rai and he then devoted himself to literary pursuits. Therefore in the light of these contemporary evidences, it is clear that Abdul Latif, as noted in the inscription, was attached with Lashkar Khan while he was the governor of Kabul and Bangash and for the same reason he was known as *Lashkar Khani*. Therefore it is possible that he had then founded this bridge in Peshawar.

3. *Muhandis* (Engineer) was the *nom de plume* of Lutfullah, the son of Ahmad of Lahore, who was a great architect of Shahjahan's reign. Lutfullah was a great poet and writer on mathematics. His *Diwan*, collection of his poetry, has been published³. It is possible that this bridge in Peshawar, as noted in the inscription, might have been designed and constructed by Lutfullah himself, because he was a great engineer, for which reason he had adopted his *nom de plume* 'Muhandis'.
4. This bridge in Peshawar was built in A.H. 1039/A.D. 1627, while Nawab Lashkar Khan was the governor of this whole area including Kabul and Bangash⁴. According to the *Maathari-al-Umara*⁵ his full name was Abu 'l-Hasan Lashkar Khan Mashhadi. But it is obvious that since Jahangir's reign Lashkar Khan held responsible jobs as one of the Mughal courtiers. When Shahjahan ascended the throne, Lashkar Khan was conferred a robe of honour, a dagger, horse, elephant and a personal rank of five thousand. Zafar Khan Ahsan, who, on behalf of his father Khwaja Abu 'l Hasan Turbati, was holding the charge of the province of Kabul and Bangash, was transferred and in his place Lashkar Khan was appointed. An army consisting of Sayyids of Barah, Mughals, Afghans and others in the royal service numbering upto fifteen thousand was put at his disposal⁶. At this moment Nazr Muhammad Khan, the ruler of Balkh and Badakhshan, out of his short-sightedness, thought that the death of Jahangir was an opportunity to push up a large army into Afghanistan. So he arrived near the city of Kabul. Lashkar Khan, on receiving the news of Nazr Muhammad Khan's arrival at Kabul, without waiting for the re-inforcement, which were being brought by Haibat Khan, marched on to Kabul rapidly. Lashkar Khan advanced to meet him and when Nazr Muhammad Khan saw that Lashkar Khan's army

1. Mulla Abdul Hamid Lahori *Badshah Nama*, Calcutta, Vol I. p. 446

2. *Amal-i-Salih*, *Op. cit* Vol III. p 437-38.

3. Chaghatai, Dr. M. Abdullah, *Ahmad Munir aur uska khandan*. Lahore 1953.

4. *Amal-i-Salih*, *op. cit*, vol. I PP. 283-294.

5. Vol. I. PP. 300-302.

6. *Maathar-i-al-Umara*, Nawab Samsam ad Daula Shah Nawaz Khan. Calcutta. A.H. 1309. Vol III PP. 163-69.

was coming with great boldness and that the mercenary servants who would help him in difficulty, were not sufficient, he did not think it advisable to engage in war; so he returned to Balkh on 9th Muharram¹, 1038 A.H. (A.D. 1628). Lashkar Khan entered Kabul without any opposition and the citizens rejoiced, who had been afflicted by the plunderings of the Uzbeks. He sent troops wherever were required and thus drove off the raiders. In the 5th regnal year he was replaced by Sayid Khan and was appointed, in place of Mahabat Khan, to take charge of Delhi, but on account of his great age he could not render proper service. Hence in the 6th regnal year he retired. He had visited the holy shrine and had spent large sums of money there. At last he turned to his native country Iran and settled at Mashhad. He founded *Sarais* (inns) and there he died².

5. The bridge was built under the management of one Daud bin Abu Muhammad Qureshi, who, according to the *Amal-i-Salih*, was the *gumashta* - agent of Lashkar Khan. It is related that when Sayid Khan, the successor of Lashkar Khan was in Kohat, he came to know of a serious rebellion of the Afghans on the border of Tirah and Bangash which was led by Kamaluddin Rohilla. Shamsheer Khan and Daud, agents (*gumashtas*) of Lashkar Khan, had furnished this information to Sayid Khan³.

We have tried to establish the historical value of this inscription in our above-noted account relating to persons mentioned therein. It undoubtedly forms an important chapter of Peshawar's history of Shahjahan's reign. But as to the actual provenance of the inscription itself, which is to-day preserved in the Peshawar Museum, I quote below from the Archaeological Survey of India Annual Report 1908-09 which records⁴:

"For sometime this inscription adorned the facade of an unpretentious mosque in a back street of the Qissa Khani Bazar. How it found its way into the mosque and got fixed in its niche was explained by its Mulla, who said that his father had acquired it from the ruins of a bridge over the Bara river on the Grand Trunk Road nearly three miles east of Peshawar city, and fixed it in the facade of the mosque".

Consequently it is clear that this inscription actually belonged to the bridge over the Bara river which was built in A.H. 1039 by Mulla Abdul Latif while Nawab Lashkar Khan was the governor of this province during Shah Jahan's reign. This chronogrammatic inscription in Persian verse might have been composed by Lutfullah *Muhandis*, son of Ahmad and the construction of the bridge was managed by Daud, son of Abu Muhammad Qureshi.

1. *Ibid.*

2. *Ibid.*

3. *Amal-i-Salih* vol 1. P. 379

4. *Archaeological Survey of India Annual Report 1908-09*, Calcutta P. 209.

III

SHAIKHAN DHERI EXCAVATION

1963 & 1964 SEASONS

(In search of the second city of Pushkalavati)

by

PROFESSOR AHMAD HASAN DANI

Two seasons' work at Shaikhan Dheri has revealed undoubtedly a city founded by the later Greek conquerors who came from Bactria, and has thus opened new prospects of understanding the Greeks and their ways of living in this part of the world and the influence that they exercised on the coming generations. The city which represents the second Pushkalavati in Gandhara holds the key not only to the understanding of the history and culture of Gandhara but also to shedding fresh light on the knotty problems of the Greeks, Scythians, Parthians and Kushanas. The materials, unearthed so far, have to say something definite on them, and whether one is interested in the chronology of the Greeks or in the dating of the Gandhara art, or in its relation with India and outside world, or even in the general archaeology of Pakistan, Afghanistan and Central Asia, he will have to examine carefully the evidence from this site. A scientific excavation, with the application of the latest methods known, has been the chief aim, and the results are now presented before the scholars in as succinct a manner as possible within the economy limit of the University. It is nevertheless believed that no confusion remains in the presentation so that the use of the materials by the scholars of the world may not be prejudiced. It is the earnest desire of the University and the excavator to recover the concealed materials before they are completely lost and to preserve them for the posterity in order to build up the lost threads of the Greeks and the romance that they once created in this part of the world. Perchance humanity may still hear the throbs and sobs of a whole line of rulers who are no more today but who attempted to establish links between the East and the West. It will take long time, patience and expense to complete the story but meanwhile the results of the two seasons are described below by the excavator.

1. INTRODUCTION

The discovery of Greek coins and stone sculptures in Gandhara in the late 18th and early 19th centuries created a stir in the West, where scholars had been interested in Classical history and archaeology. These materials held prospects for tracing the eastward adventures of Alexander the Great and also for assessing the influence of Hellenism¹ on the Asiatics. For about two

1. See Sir William Tait - *Greeks in Bactria and India*, Cambridge, 2nd ed. 1951.

hundred years the antiques have been sought, acquired and taken away to fill the museum galleries of the West, where they have provided evidence for building theories on "Eastern Hellenism". This was the first phase of archaeology when the coins revealed the existence of a number of Greek, Scythian, Parthian, Kushana and Huna rulers but the sculptures had to be relegated to "Graeco-Buddhist" school of art, as they were all Buddhist in content and spirit. The second phase began in the trek of the Buddhist relics. The publication of the Chinese travel accounts of Hiuen Tsang inspired Alexander Cunningham¹ to follow his foot-steps and identify many places of old. On its basis Foucher was later able to build up *Ancient Geography of Gandhara*. The time was now ripe to open up the mounds and to tell the story of old civilizations as they rose and fell. Apart from the casual diggings by the amateurs in the 19th century, we come to the period of Mr. (later Sir) John Marshall, who since 1901 started the third period of archaeology in Gandhara. Trained in the Greek archaeology, Marshall first struck his pick at the high mound of Bala Hisar (near Charsada) in 1902-3, fondly taking it for an acropolis. The attempt was rather premature but once the beginning was made, others followed to unravel the old glories of Buddhism at Shahji-ki-Dheri, Takht-i-Bahi, Jamalgarhi and other places². The search for the Buddhist relics has continued to inspire even present-day excavators like the Italians and the Japanese as they yield rich profits in sculptures. Marshall, however, left the area west of the Indus and busied himself in Eastern Gandhara at the site of Taxila, where he laid bare three main cities and a number of Buddhist establishments. The materials so far unearthed could now be related to a city life where some sort of chronology could be evolved. But Marshall's bias for Hellenism kept up the ghost of "Hellenistic" concept in all his writings. However, the contributions of the Scytho-Parthian and Kushana periods held greater attraction than that of the Greeks. To them proper context was given in the fourth stage of archaeology, when Dr. (later Sir) Mortimer Wheeler, being a Professor of the Archaeology of the Roman Provinces, looked at the sculptures of Gandhara from the view-point of Roman art. It is this line of thinking which is underlined by Benjamin Rowland³ thus: "The Sculpture of Gandhara might be regarded as a provincial Roman School". Apart from this theory Sir Mortimer laid a firm basis for a chronological study of the archaeological wealth in Gandhara by his excavations at Taxila (1944-45) and at Bala Hisar (1958), and thus paved the way for the final stage of archaeology when art must be related to the history and culture of the peoples who rose and fell in the definite geographic environment of Gandhara.

Sir Mortimer's excavation at the Bala Hisar⁴ mound, though short, has provided us with a definite sequence of cultures in Gandhara from about 6th to 1st centuries B.C. It was necessary to extend this sequence into the main historical period of Gandhara by excavating a suitable site. Such a site was found to be at Shaikhan Dheri opposite Bala Hisar (See Pl. IV), about twenty two miles north of Peshawar (see Fig. No. 1). An aerial photograph

1. See his *Report of the Archaeological Survey of India*, Vol. V.

2. Reports can be read in the *Annual Reports of the Archaeological Survey of India*.

3. *Gandhara Sculpture from Pakistan Museums*, Text. P. 8. New York 1960.

4. *Charsada, A Metropolis of the North West Frontier*, Oxford, 1962 (abbreviated as Charsada)

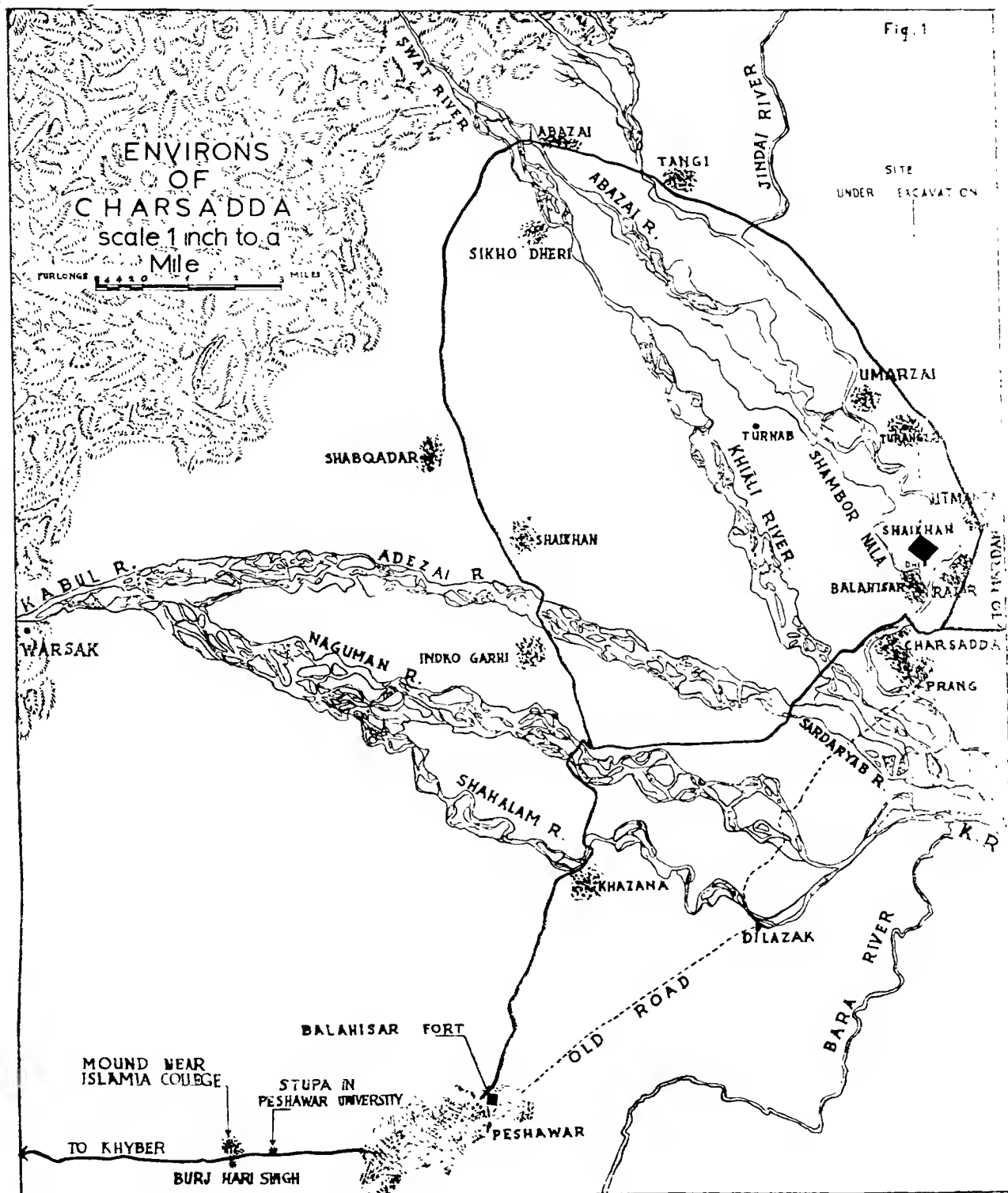
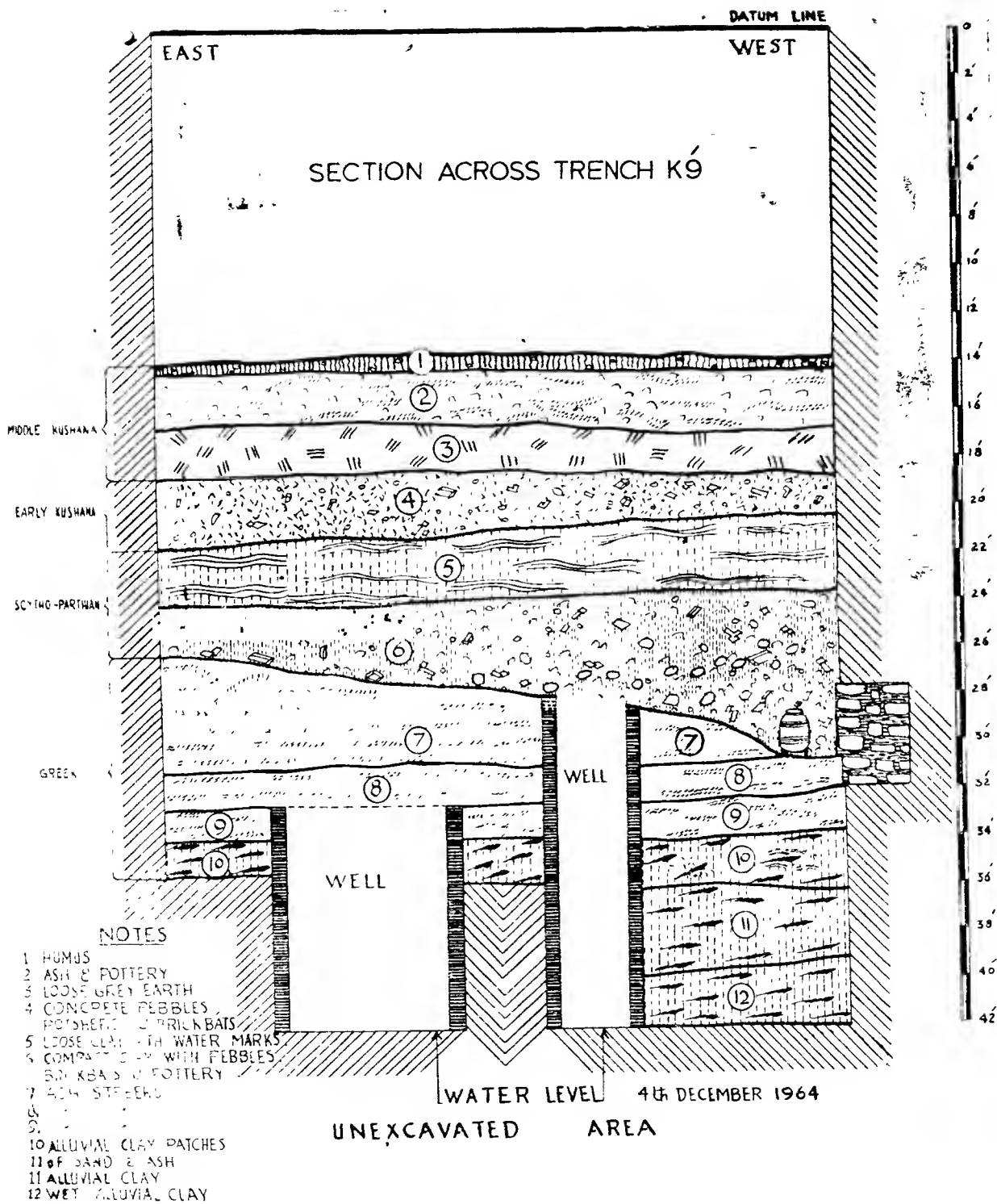


Fig. 7



SURVEY PLAN OF SITE SHAIKHAN DHERI

SCALE - 1" = 100'

LOW LAND
WITH
CULTIVATION

CULTIVATED LAND

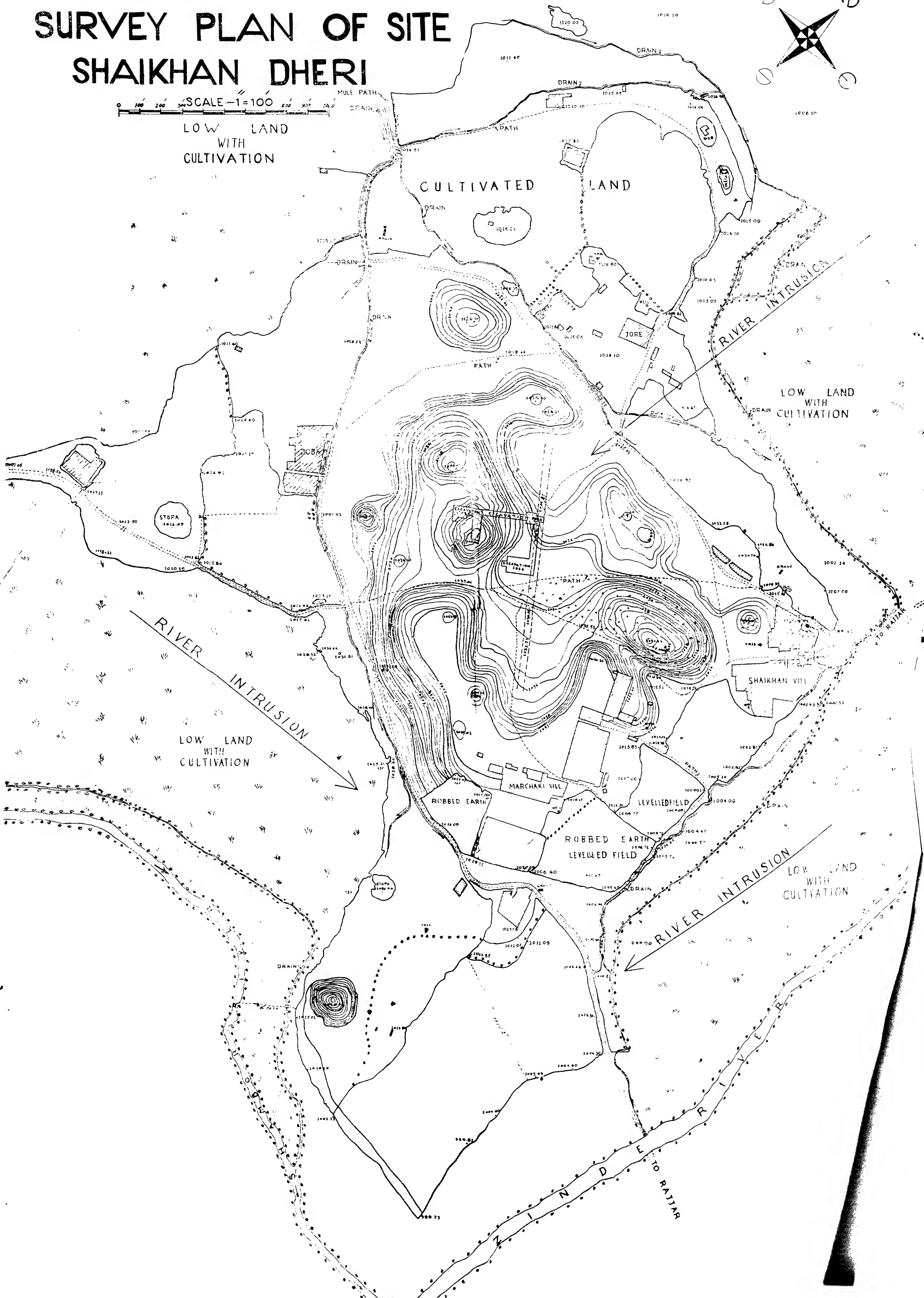
LOW LAND
WITH
CULTIVATION

RIVER
INTRUSION

LOW LAND
WITH
CULTIVATION

RIVER
INTRUSION

LOW LAND
WITH
CULTIVATION



SHAIKHAN DHERI 1963 & 1964
PLAN OF THE EXPOSED STRUCTURES

Fig. 3

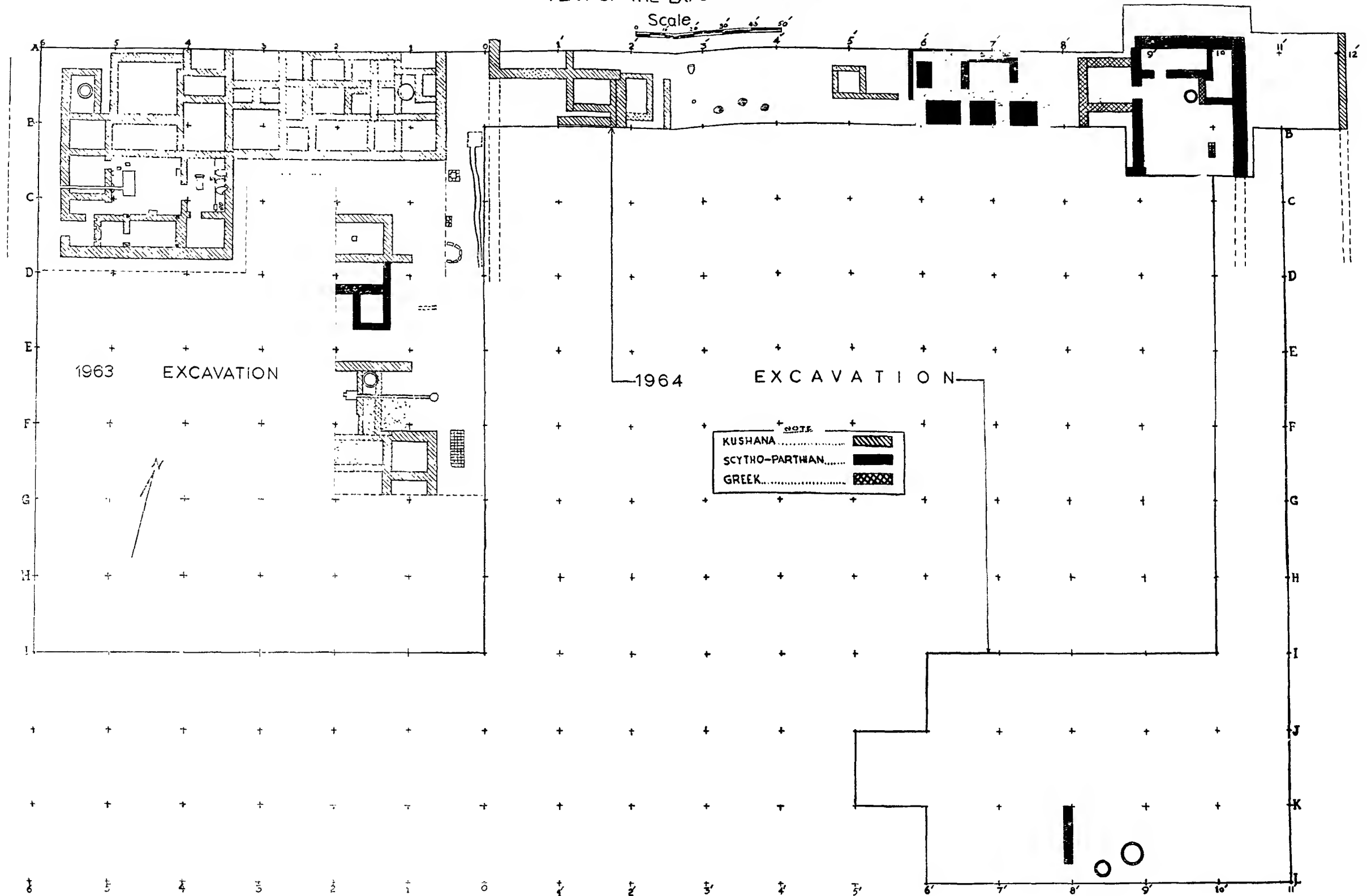
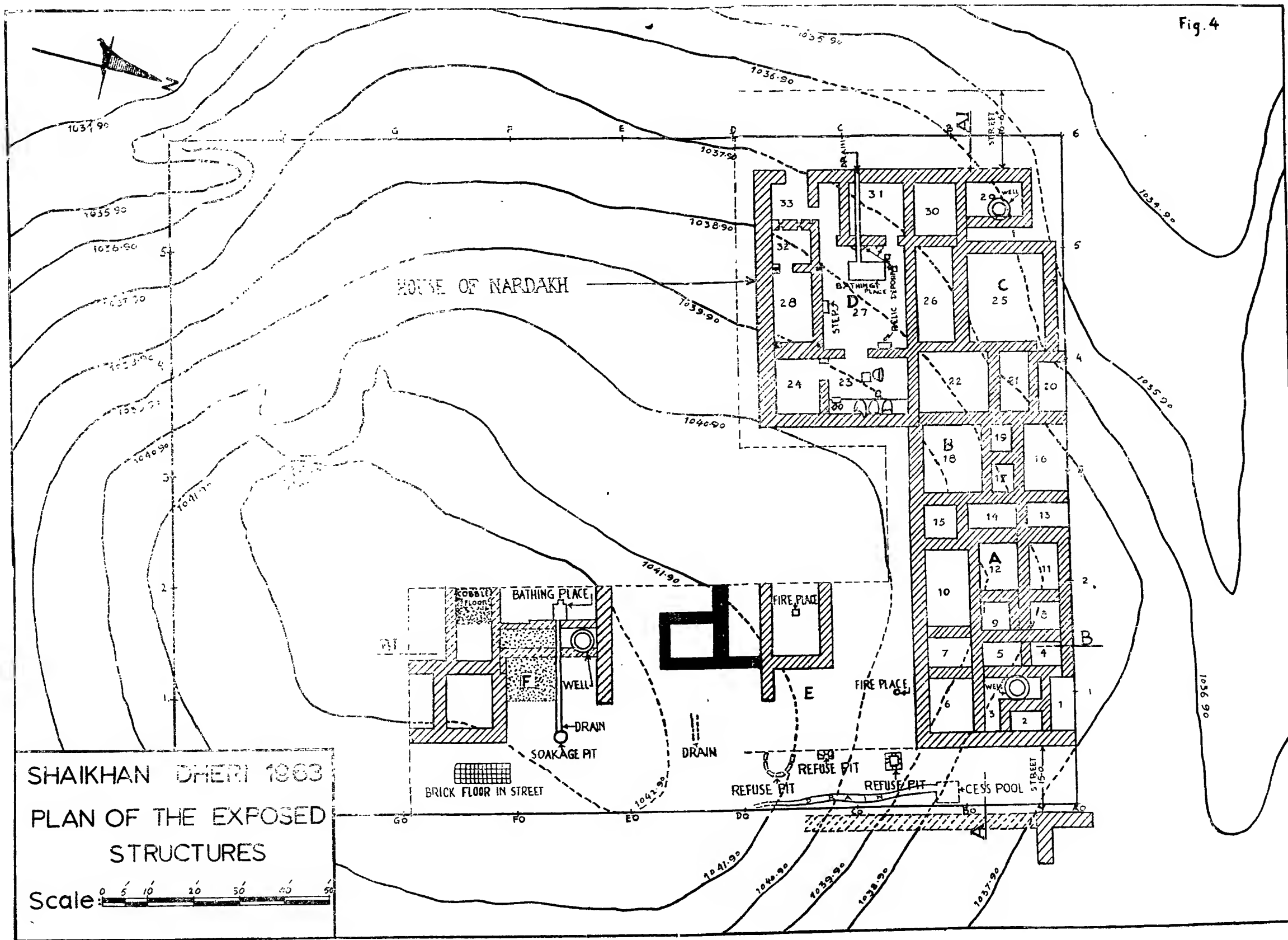
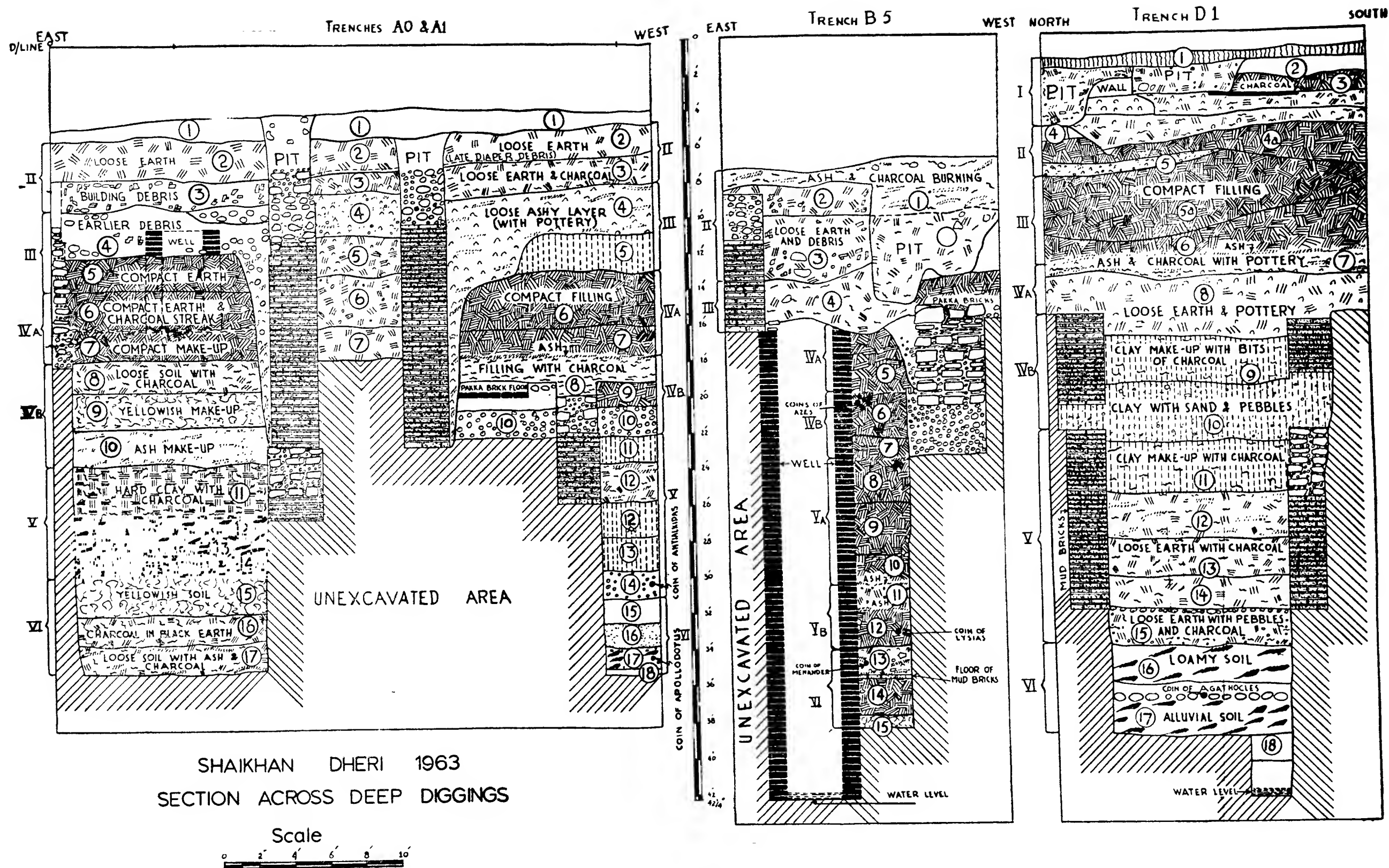
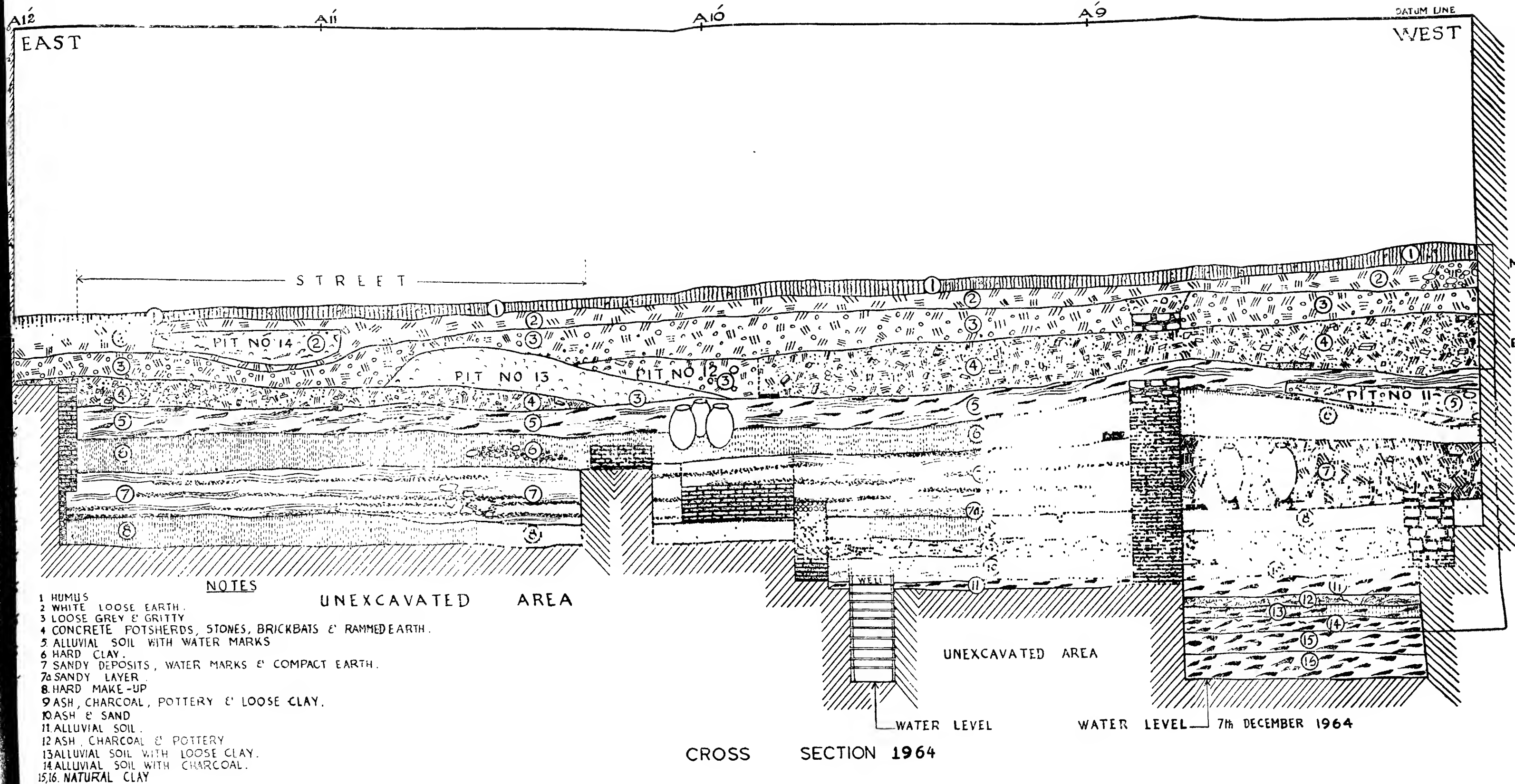


Fig. 4







of the site taken by P.A.F. in 1958 convinced Sir Mortimer of its importance, and he was the first to recognise the nature of the buried¹ city. Taking a cue from his description I decided to excavate the site as it lay in the very heart of ancient Gandhara. The site also held a long prospect for giving field training to the archaeology students of the University of Peshawar.

Excavation of a site is like the execution of a military campaign, in which the cooperation of several persons is required. Without paying a word of thanks to them I cannot begin the report. On administrative side I am obliged to my Vice-Chancellor, Mr. Mohammad Ali, the then Registrar Maulana Ahmad Hasan and the Treasurer, Mr. M. A. Khan, who not only accepted my proposal for excavation and provided funds but also paid several visits to the site to encourage my staff and students. To the owners of the land I am greatly indebted for permission to carry out excavation. Through the courtesy of Mr. Nawab Khan, Chairman, Rajar Union Council, the owners, Messrs Sher Muhammad Khan, Khan Siddiq Khan, Muhammad Aslam Khan, Abdul Qadir, Nadir Khan and Nasir Khan, not only agreed to the proposal but also placed the traditional Pathan hospitality at our disposal. Formal approval of the Government was obtained in 1964 after the site was protected, and Dr. F. A. Khan, Director of Archaeology in Pakistan, gave all the cooperation and help that we needed. In the field I had the benefit of cooperation, during the first season, from Dr. F. R. Allchin and Dr. Mrs. B. Allchin of the University of Cambridge, who supervised the registration of antiquities and drawing of pottery. It was, however, the post-graduate students of the Department of Archaeology, who, with the help of the local labourers, did the main digging under my general direction. In the work of supervision Mr. F. A. Durrani, Senior Lecturer in the Department, played a leading role. During the second season he was put solely in charge of the excavation with Mr. Salahuddin as his assistant. The first camp was set by Mr. M. A. Shakoar, former Curator of the Peshawar Museum, and later the whole management was shouldered by Mr. Sardar Mohammad, now Field Superintendent in the Department. Metal objects and coins were cleaned by Mr. Mohammad Kamal, Chemist and Curator of the Department. In the preparation of this report I had the benefit of assistance from my former students and now colleagues, Mr. Fidaullah, Mr. Wilayat Khan Bhatti, Mr. Abdul Rahman and Mr. Sardar Mohammad. The pottery section along with the drawings was wholly prepared by Mr. Fidaullah. Other drawings were copied and inked by Mr. M. Daud and the photographs taken by Mr. M. Sabir. On my request P.A.F. took new aerial photographs of the site, which are being published here. To all of them I am deeply indebted and to their labour of love this report is dedicated.

2. THE MOUND

Shaikhan Dheri (Fig. 2), the Mound of the Shaikhan (the people who have now built their houses on a part of the mound), stands on an alluvial plain about a mile west of Rajar village on the western side of the river Zinde, a branch of the Swat river. The mound gradually rises above the flood plain of Zinde and Sambor — the two streams that impinge on the two arms of the

1. Ibid. PP. 16-17

mound and later meet together further down. It is these streams that have dictated the contour of the mound and probably also the outline of the original city. For Sambor is the channel that separates Shaikhhan Dheri from Bala Hisar and firmly limits the extent of the city on that side. Nay, as the photograph (pl. 4) shows, it has eaten away the side and entered into the houses and streets of the city. The other river Zinde has spread thick deposit of silt which is being taken advantage of by the modern cultivators. The villagers, in levelling the fields, have hit upon the eastern arm of the mound and made several terraces for cultivation. The river sides are lush with green fields. As the general level slopes down from north to south, modern irrigation channels over the north-western and north-eastern arms have further cut through the original mound and induced the villagers to lower down the sides into flat plains for cultivation. The general picture is therefore very confusing. But if what remains, is a true representative of the original condition, it is possible to surmise that the original mound was of a rhombos shape entombing a city of a similar pattern. This shape, though unusual, is dictated by the flow of the two streams. It is in harmony with this pattern that the streets are laid from north to south so that if the rivers perchance force into the city, the flow water may run out through the streets. Such floods have not been unusual and their marks are still left over the old streets. Through the main gate in the north the river appears to have entered the city and cut away a large slice of the mound. Today we find several high deposits separated by flood channels. The eastern section of the high mound is covered by modern Muslim graves and the south-eastern quadrant is filled by modern houses built out of the stones unearthed from the neighbouring area. It is their lines of excavation which have revealed, in the aerial photograph, the main street pattern of old and thus convinced Sir Mortimer Wheeler of the Hellenistic design of the old city. The highest part of the mound is in the south where the photograph shows a circle representing the ruins of an old stupa. It is 1045 feet above sea level. Thus the entire Shaikhhan Dheri mound is eighteen feet lower than the highest part of the Bala Hisar mound.

3. PLAN OF EXCAVATION

The city was, no doubt, originally fortified probably following the same line as the shape suggests. The south-eastern arm of the fortification line is not difficult to detect. But in the first two seasons the problem of the fortification was not taken up. The first question was to establish the main lines of streets in a proper scientific excavation and the second was to go down vertically to reveal the different strata of occupation. After the different periods were firmly determined and the foundation of the original city properly decided, spatial excavation was proposed periodwise in order to get the cultural data.

Undisturbed high flat area 200'x150' north of the main east-west axis was selected, to which some more land on the east and west was added in order to reveal the full width of the streets (see plan fig. 4). Away from this area near the camping ground to the west a trench called X was laid to corroborate the materials of deep digging. In order to establish the trench system in the main area of excavation, a straight line was extended to the north from the supposed

line of street just west of the stupa ruins already exposed by the villagers. This established the north-south line and formed the eastern arm of the rectangular area marked for excavation. Zero point was fixed on the north and this arm of 200' was divided into smaller sections of 20' each, marked A, B, C, D, E, F, G, H, etc. From the zero point the northern arm was drawn westward and similarly each section of 20' was demarcated and numbered 1, 2, 3, 4, 5, and 6. The entire area was thus reduced into a grid of trenches, each 20' square. In 1964 the excavation was extended eastward in the same pattern right upto the lowest level in the middle of the mound with the primary aim to determine the main north-south street of the city (see fig. 3). The extended line was marked 1', 2', 3', 4', 5', etc. until the main street measuring 33' was discovered in trenches A10', A11', A12'. This street was then marked on the mound (see pl. XII, No. 4). It does not lead straight to the stupa ruins but goes much farther east through a narrow passage in between the modern houses.

4. EXCAVATION RESULTS

Sir Mortimer Wheeler¹ wisely compared the Shaikhan Dheri mound with the Sirkap ruins at Taxila and added: "subject to verification by digging, the sequence at Shaikhan thus reflects the evidence of Sirkap. In the first century B.C., if not somewhat earlier (perhaps as early as the time of Menander), Pushkalavati was moved by a new dynasty to a new adjacent site, and was there laid out on western lines without the inherited embarrassments of previous accumulation". Such a prediction of an archaeologist could never be more true than in the case of Shaikhan Dheri as is proved by the present excavation.

In all the lower level diggings at Shaikhan Dheri the evidence is clear on the point that the city was originally built on alluvial soil (see fig. 5 section across trench D1 layer 17). It is on this soil that the floor was made up of river pebbles. In this rubble make-up a square copper coin of Agathocles (type no. 45 of *Punjab Museum Catalogue*) was found. In another trench A1 in the same layer a square copper coin of Apollodotus (type no. 307 of *Punjab Museum Catalogue*) was found. But the first floor of mud-bricks, seen in trench B5, yielded a square copper coin of Menander (type no. 512 of *Punjab Museum Catalogue*). The evidence is thus clear that the city was founded by one of the early Bactrian Greek conquerors of this region. Allowing for some time lag after the issue of the coinage and remembering the short rule of Agathocles, the first of the Greek rulers who issued currency in imitation of the local type, we may fairly well propound that the city was most probably founded by Menander, the most famous of the Bactrian Greek rulers of this region, in about the middle of the second century B.C.

On the topmost layers a number of coins of Vasudeva I (copper coin of Siva and bull type) were recovered. These were the last issues on Shaikhan Dheri. It is therefore clear that the site was given up during his reign. The cause of abandonment is writ large in the accumulation of layers during the Kushana period particularly after the time of Kanishka I. In this last stage

1. *Charsada*, PP. 13-14

of occupation the city shrank, the greater part being affected by flood. Residence was restricted to smaller area which rose higher and higher, and the houses were built on the higher spots by taking away the building materials from the earlier city as to-day we witness the modern villagers doing the same. This precarious situation continued until the vagaries of the river (probably of Zinde) made it impossible for the people to live here and the population completely shifted during the reign of Vasudeva to the neighbouring city (Rajar mound) on the other side of the river. Thus the end of the city came towards the close of the second century A. D. or in the middle of the 3rd century A. D. (depending upon the exact dating of Vasudeva I).

This process of using the earlier building material is amply evidenced in the excavated remains of the Kushana period. The reason for such a robbery was the lack of building stones in the immediate neighbourhood, for Charsada lies in the alluvial flat area far away from the hills. It was easier and cheaper for the builders to dig down to the foundations of the earlier walls and take out stones and fill them with mud-bricks, as is clear in the sections (Fig. 5). The result was the deep mud-brick foundation. On it was laid rubble core and then the main wall was built in diaper. It is this way of reconstruction which helped in keeping in tact the original lay-out of the city as was built by the Greeks. Though the city shrank and the houses were reduced later, still the general plan was not disturbed. As a result from top to bottom we find the same system of streets, though the house plan often varied. In our excavations we discovered three streets all parallel to each other and a corner of a house at the cross street (pl XII, No. 3), the side-street crossing at right angle. It is thus clear that the city was planned with a regular system of streets and that this planning was due to the Bactrian Greeks who founded the city. In the case of Shaikhani Dheri we have no doubts about the original planning and about the people who gave such a planning.

5. CHRONOLOGY

In our excavations we were lucky enough to find 475 coins, all distributed in different layers. Only one small hoard of nine coins of Azes was found in a small pot. The coins were all cleaned in the field laboratory and most of them were identified. It is on the basis of the recognizable coins that the chronology of Shaikhani Dheri has been built up. It is, however, clearly understood that the coins by their very nature survive longer than expected. Such survivals will be clear from the chart (No. 2) of the coins published in this report. Their evidence could obviously not be decisive. Barring these exceptions and further allowing for any possible overlap, we have dated the strata on the basis of the latest series of coins. On the foundation of this chronology other materials have been studied and, as the description will show, they do not contradict the main scheme.

Stratigraphically we have been able to distinguish three main phases in the construction of the city:- Phase A, Phase B, and Phase C. If the coins could supply a nomenclature, we would like to call them Phase A—Kushana, Phase B — Scytho-Parthian, Phase C — Greek.

1903

(15), (1
B5 (11) (1

(14) (15) D1 (1
B5 (1

3
1-6



They have been further sub-divided into different periods of reconstructions in the city and again dated on the basis of coins:

Phase A: Kushana.

Period I	Late Kushana	Time of Vasudeva.
Period II	Middle Kushana	Time of Kanishka and Huvishka.
Period III	Early Kushana	Time of Soter Megas, Wima Kadphises and Kujula Kadphises.

Phase B: Scytho-Parthian.

Period IV A	Late Parthian	Period of destruction and levelling.
Period IV B	Main Scytho-Parthian	

Phase C: Greek.

Period V (A)	Late Greek	Time of Minor Greek rulers.
Period V (B)	Middle Greek	Post Menander Time.
Period VI	Early	Time of Menander. Apollodotus I and Agathocles.

We have given earlier the closing brackets — the date of the foundation of the city as mid-second century B.C. and the date of abandonment about the end of the second century A.D. (exact date depending on the absolute dating of the reign-period of Vasudeva).

In the section on coins we will discuss the dating of the different Greek rulers, whose coins were discovered in the excavation. In Phase B there was no indication at all to distinguish the Scythian period from that of the Parthian. We have not been able to find separate structural periods. Hence we have called the phase Scytho-Parthian and in terms of absolute chronology we would like to date the phase from mid-first century B.C. to mid-first century A.D.

We have also been able to get radio-carbon dates¹ on three charcoal samples sent for examination to U.S.A. One charcoal sample was taken from pit 1 location A1, which had mixed materials from different periods. It is from this pit that a number of fragments of black polished pottery, an imitation of N.B.P., were recovered. Two charcoal samples were taken from the House of Naradakha (see below) in which wooden pillars were burnt and fallen in the floor of the house. It is in the layer containing the burnt wooden beams that the Gandhara sculptures were found. With them were recovered large number of the coins of Kanishka.

Michigan State University Test

Date of excavation 1963

1. SHK location B4. stratum (2)

1990 \pm 120=147 B.C. to A.D. 93.

1. I am indebted to the following for the tests: (i) President John Hanna of Michigan State University for one test in his University laboratory; (ii) Dr. Walter A. Fairservis (Jr.), Director Thomas Burke Memorial Washington State Museum for two tests and (iii) the authorities of the American Philosophical Society for providing funds.

Washington State Museum Tests.

2. UW 78. SHK location B4. stratum (2) $1940 \pm 70 = 47$ B.C. to A.D. 93.
3. UW 70. SHK location A1. Pit 1. $2155 \pm 60 = 252$ B.C. to 132 B.C.

Before we discuss these dates, it must be premised that the margin of errors in these dates is too long to be accepted for so close a period. However, if the latest dates are taken into consideration, the results are as follows:

- | | |
|--------------------|----------|
| (1) B4 stratum (2) | A.D. 93. |
| (2) B4 stratum (2) | A.D. 93. |
| (3) A1 pit 1 | 132 B.C. |

If the earliest dates are taken into consideration, they yield:

- | | |
|--------------------|----------|
| (1) B4 stratum (2) | 147 B.C. |
| (2) B4 stratum (2) | 47 B.C. |
| (3) A1 pit 1 | 252 B.C. |

The earliest dates are decidedly wide the mark but the latest dates fall within our comprehension and two of them agree with each other. If I am given the choice, I would choose the latter. If this is acceptable, then A.D. 93 falls within the reign of Kanishka I in the Middle Kushana period. Again Pit 1 in trench A1 contains the materials beginning from at least 132 B.C.

6. EXPOSED STRUCTURES

In 1963 the rectangular area, 200' long by 150' broad, could not be completely excavated. Our excavation was mainly confined to the eastern and northern arms of the rectangle (see Fig. 4). The exposed structures therefore fall in L-shape. But because of destruction and levelling up in the later periods there were several breaks in the walls and houses. Again super-imposition of structures one above the other did not permit us to go down to the virgin soil all over the area. Unless we were prepared to destroy all the walls of the later periods, it was impossible to dig lower. Such a problem is faced by all the excavators in a city site. Hence we selected three places, the first in group A, the second in Group C and the third in Group E, for digging to the lowest levels, the sections through which are published here (Fig. 5). The exposed structures, as seen in the plan of 1963 (Fig. 4), all belong to the Kushana period, except the walls shaded black. In group E, very few walls were preserved. The hatched walls here were of mud-brick. The shaded walls, which belonged to the Scytho-Parthian and earlier levels, were of stone diaper. But though the structures, as they are to-day, belong mostly to the Kushana period, under them lie earlier period walls in the same alignment. The minor variations are no doubt seen but the major walls continue from bottom to the top (see cross section Fig. 5 for some examples). The two streets, running north to south, parallel to each other, remained undisturbed throughout the occupation of the city. The drains, refuse pits and cess pool (Pl. VII No. 2), all belong to the Kushana period. They were all built of stone and uncovered, except the drain shown in dotted lines in group E. This drain (pl. XIII, No. 3)



No. 1. Shaikhhan Dheri - Training Camp, 1963



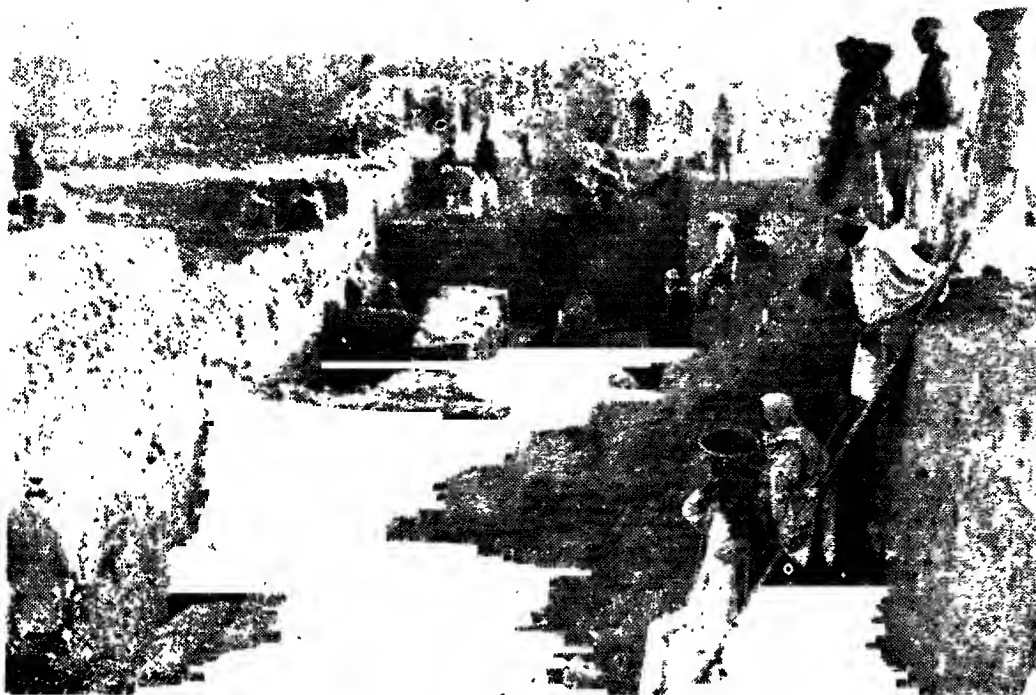
No. 2 Shaikhhan Dheri - Mr. Mohammad Ali, the Vice-Chancellor, with pick,
Maulana Ahmad Hasson, the Registrar, with shovel and
Mr. M. A. Khan, the Treasurer with basket



Charsada - Aerial view, Raja Hisar and Shaikhun Dheri mounds on the left of Zinde river



Shaikhhan Dhert - Close aerial view showing the street pattern



No. 1. Shaikhan Dheri - Excavation in progress



No. 2. 1963 excavation



No. 1. - Thick dividing wall in the middle



No. 2. Street drain discharging in a cesspool



No. 1. House of Natadakha - general view



No. 2. Drain leading out of the house



No. 3. Arch over the drain



No. 1 Ablution place



No. 3. Brick work with chases



No. 2. Iron pieces



No. 4. Burnt wood

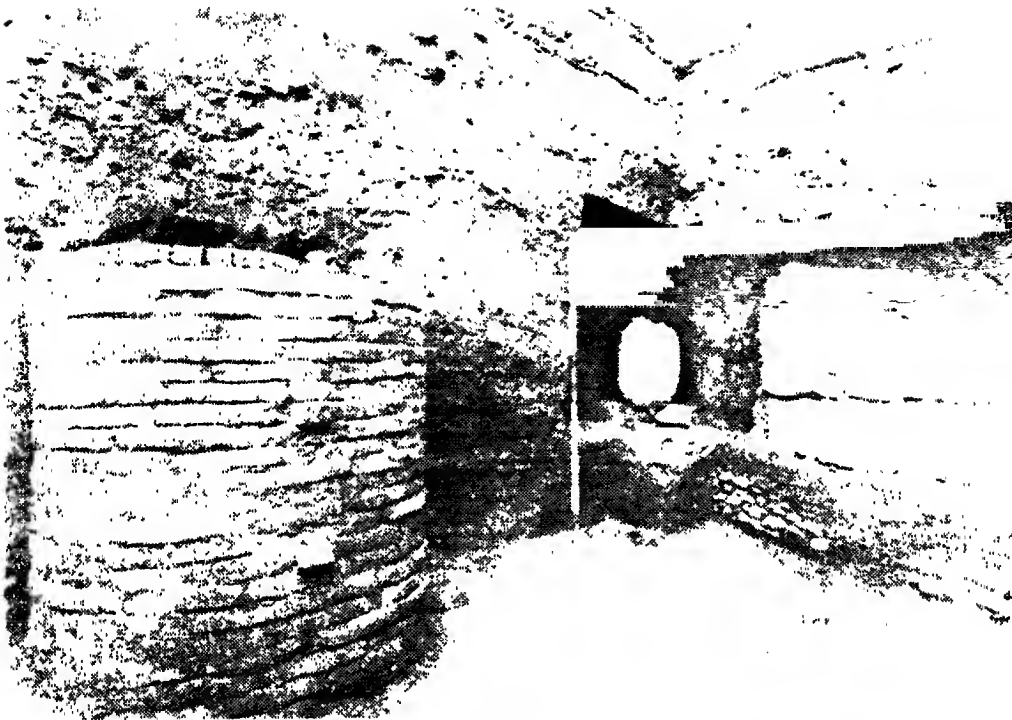
House of Naradakha



No. 1. Mill stone



No. 2. Storage jars
Pl. X



No. 1. K9'—Brick well, three-legged jar and stone wall resting on mud bricks



No. 2. A10' Storage jars in a shopping platform



No. 1. A9'—Greek peried walls on mud brick foundation



No. 2. A9'—Three floor levels



No. 3. A11'—Corner wall in the main street



No. 4. Main street



No. 1 E1—Bathing place



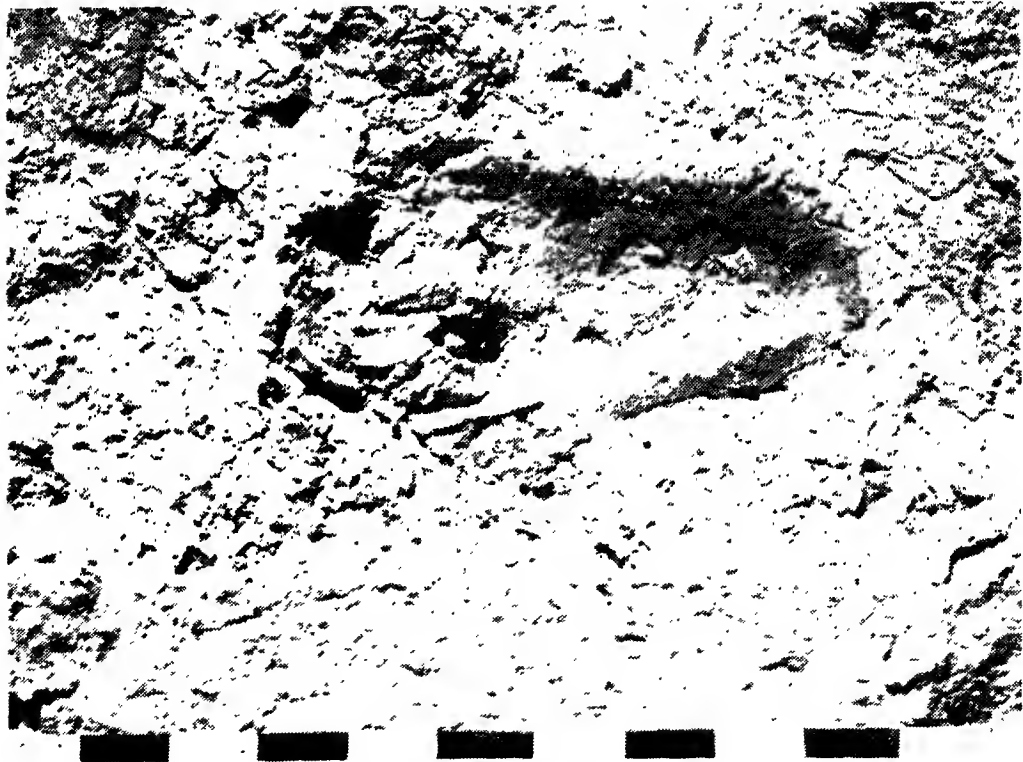
No. 2. A7'—Pottery drain



No. 3. DO—Brick drain



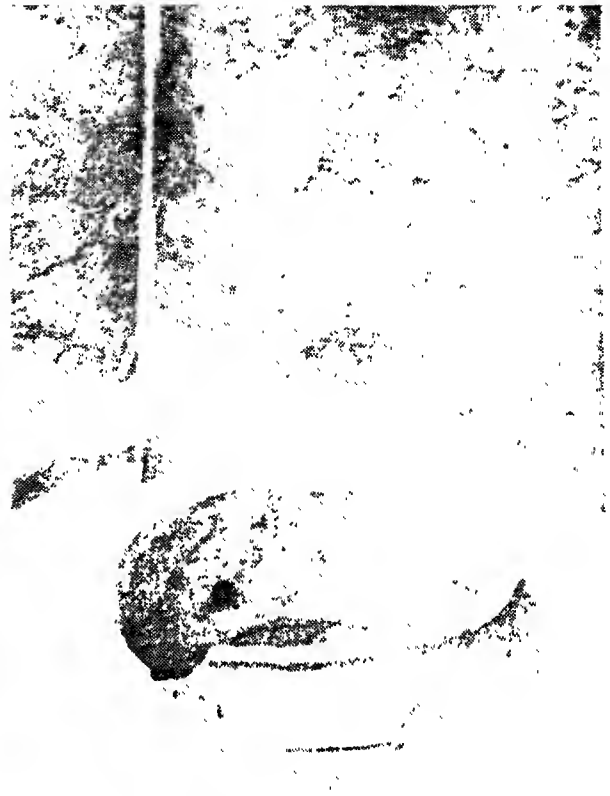
No. 1. FO. Brick patching in the street.



No. 2. FO. Foot-print.



No. 1. A5—Brick well



No. 2. A10'—Pottery well



No. 3. A1--Brick well



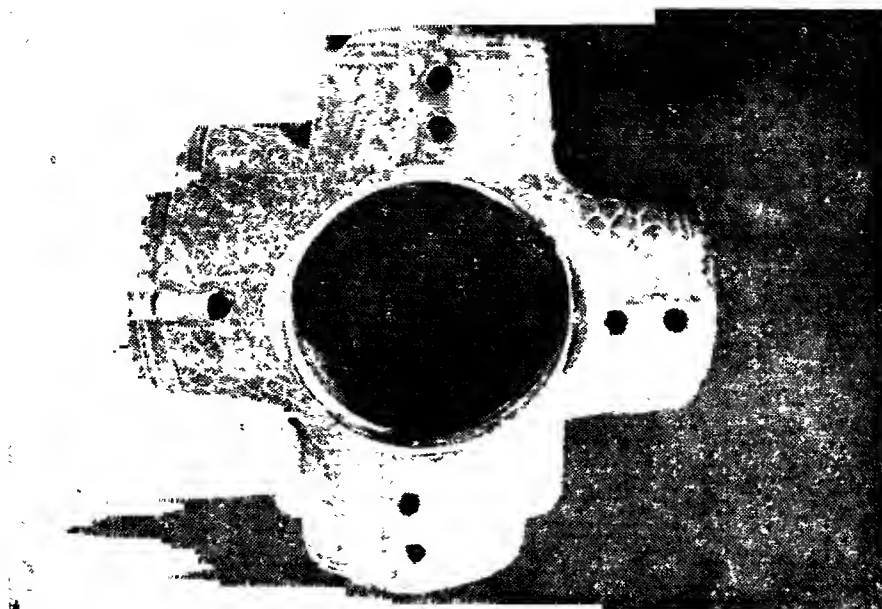
No. 4. E1—Brick well



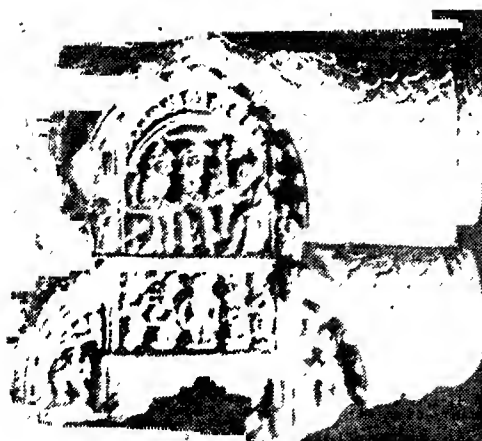
Hariti from the House of Naradakha
(Kanishka period)



Buddha from the House of Naradakha
(Kanishka period)



No. 1. Cruciform casket



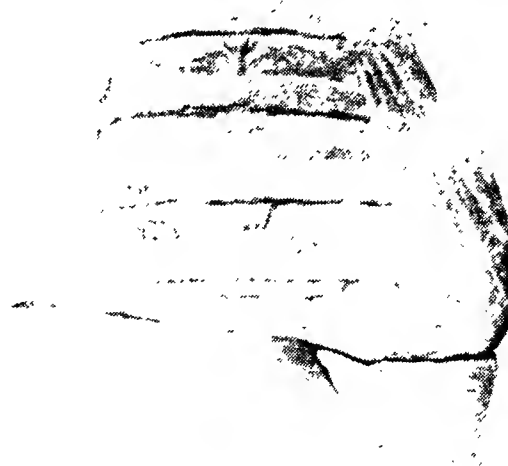
No. 2. Buddha scene on the casket



No. 3. Buddha scene on the casket



No. 4. Red sandstone Buddha



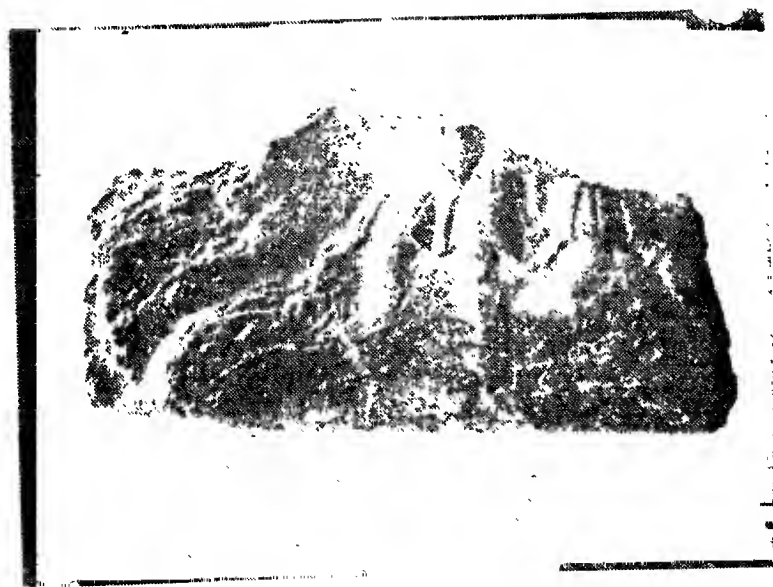
No. 5. Back side of No. 4



No. 1. Stupa model



No. 2. Bodhisattva Maitreya



No. 3. Part of men in relief



No. 1. Head of Buddha



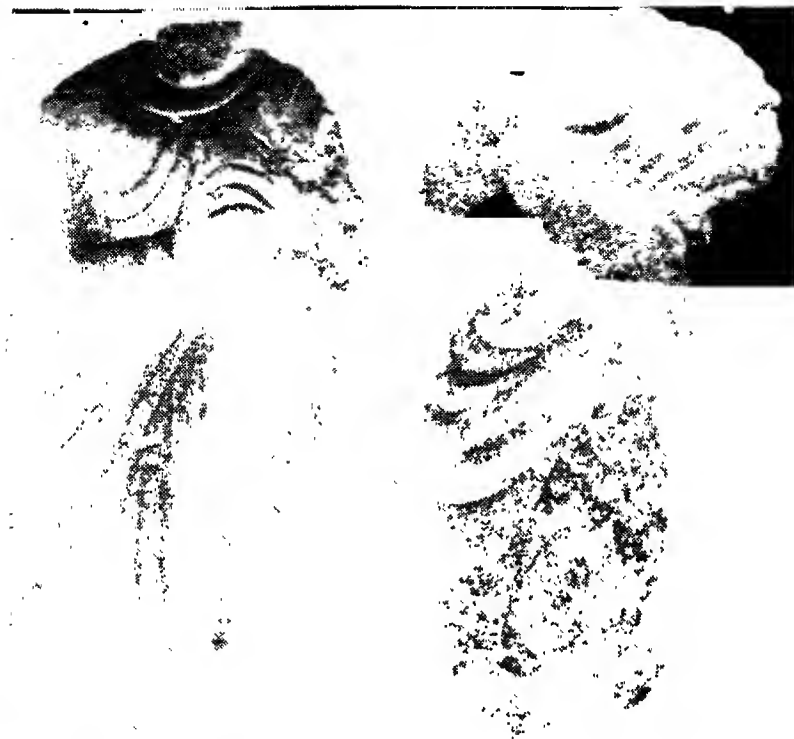
No. 2. Buddha in *Abhaya* pose



No. 3. Standing Buddha



No. 4. Standing figure



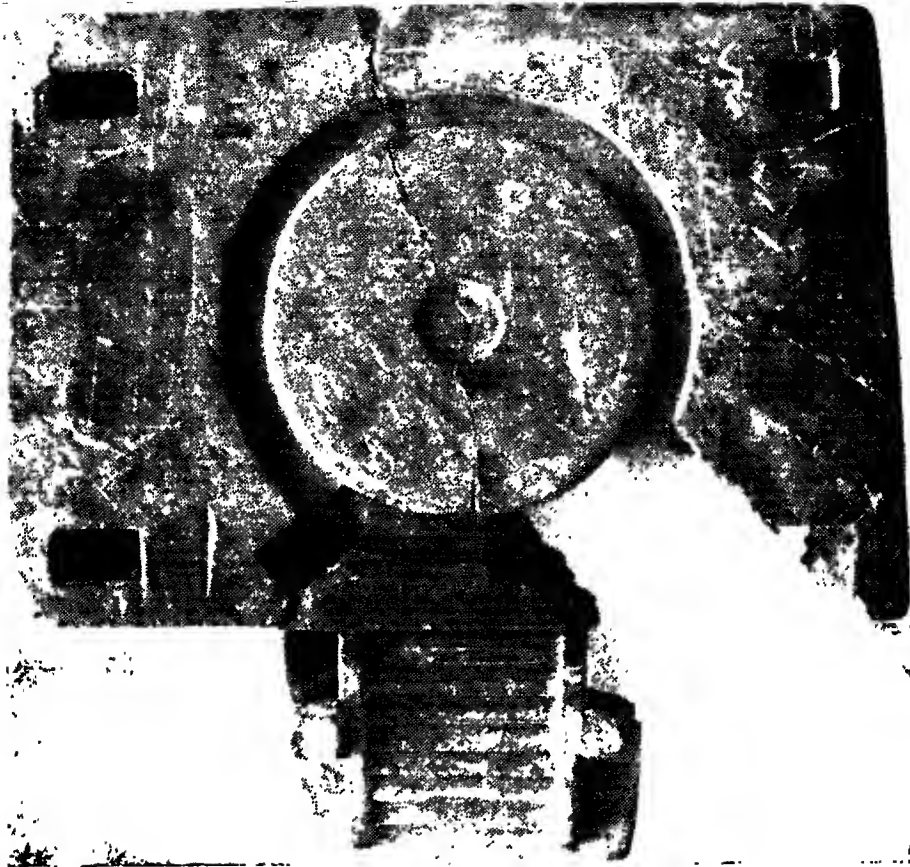
No. 1. Two devotees



No. 2. Four-armed goddess



No. 3. Maitreya



No. 1. Niraikhii pedestal

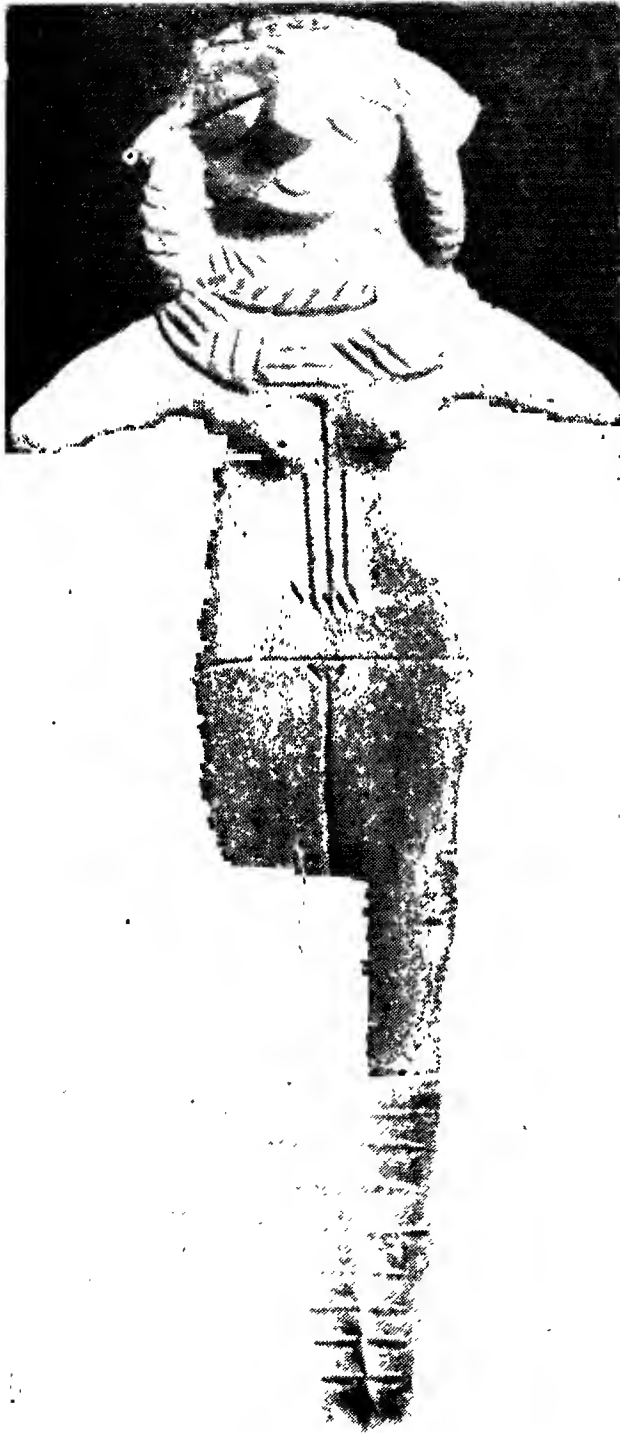


No. 2. Inscription on the back of the pedestal



Three views of human terracotta, Greek level
(See also Pl. 51)





No. 1. Terracotta figurine (Size 1/1)



No. 2. Back view of No. 1 (Size 1/1)



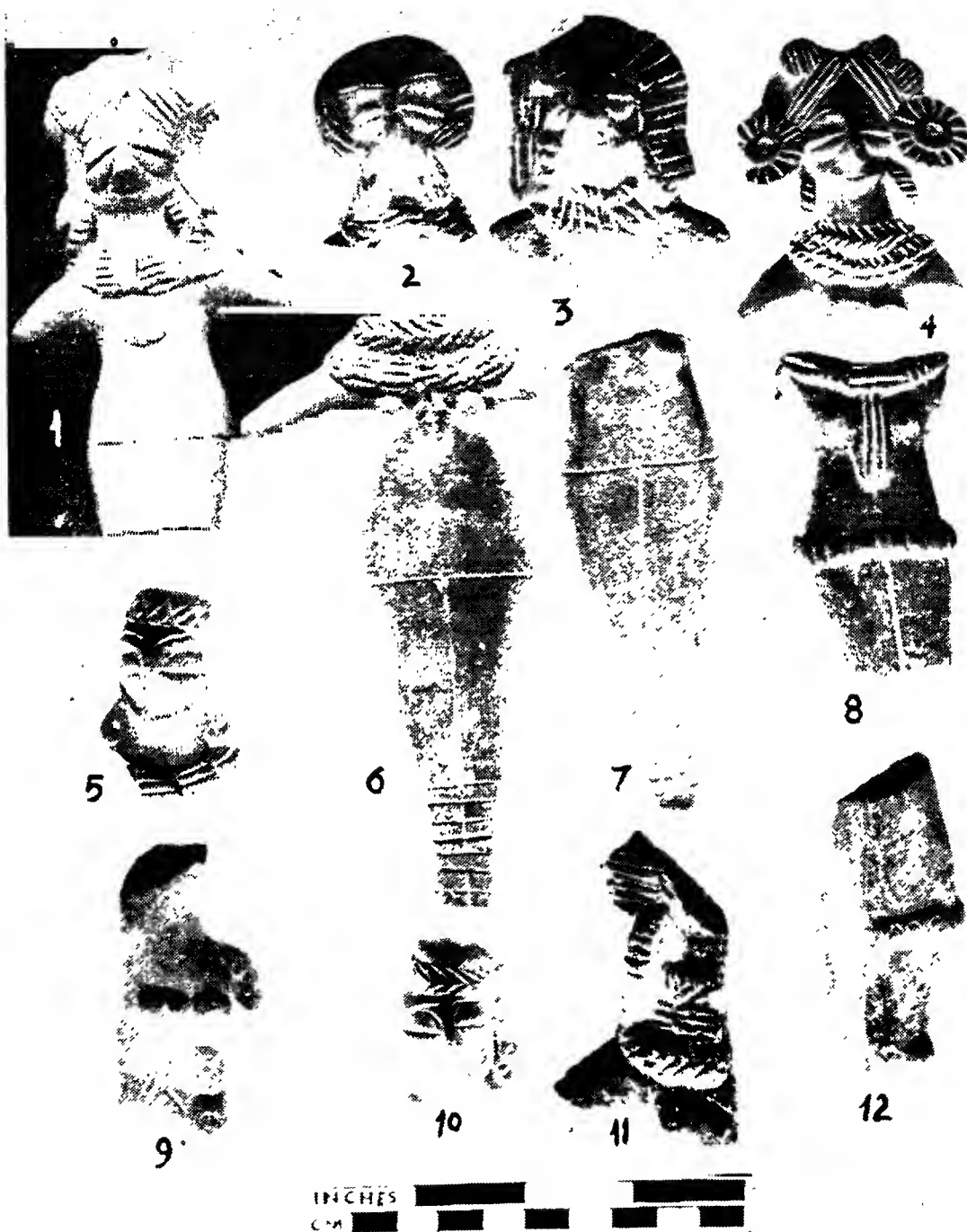
Human terracottas



5a back view



8a back view



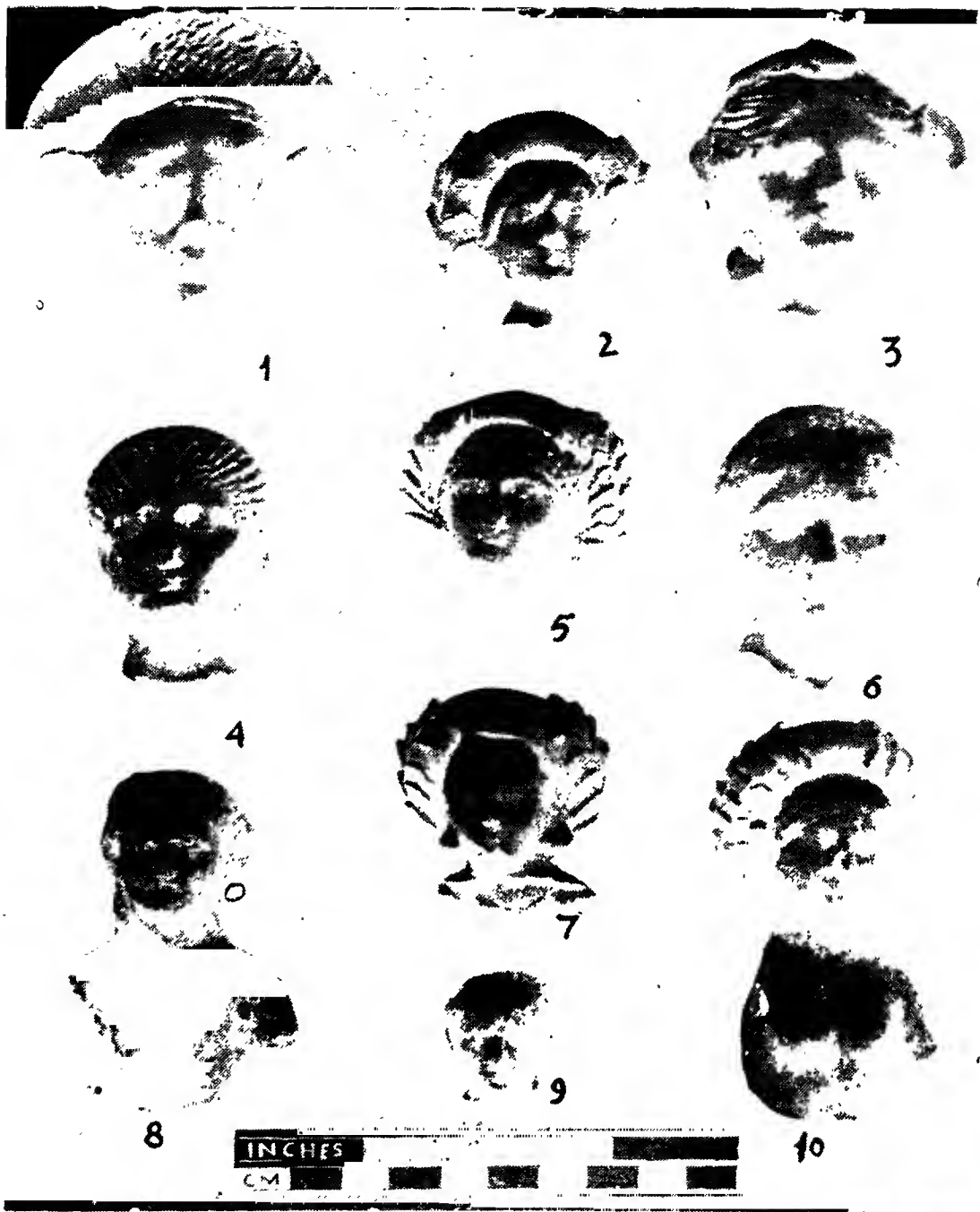
Human terracottas



3a back view



Human terracottas



Moulded terracottas



10a back view



1



3



1a



4



2



2a



5

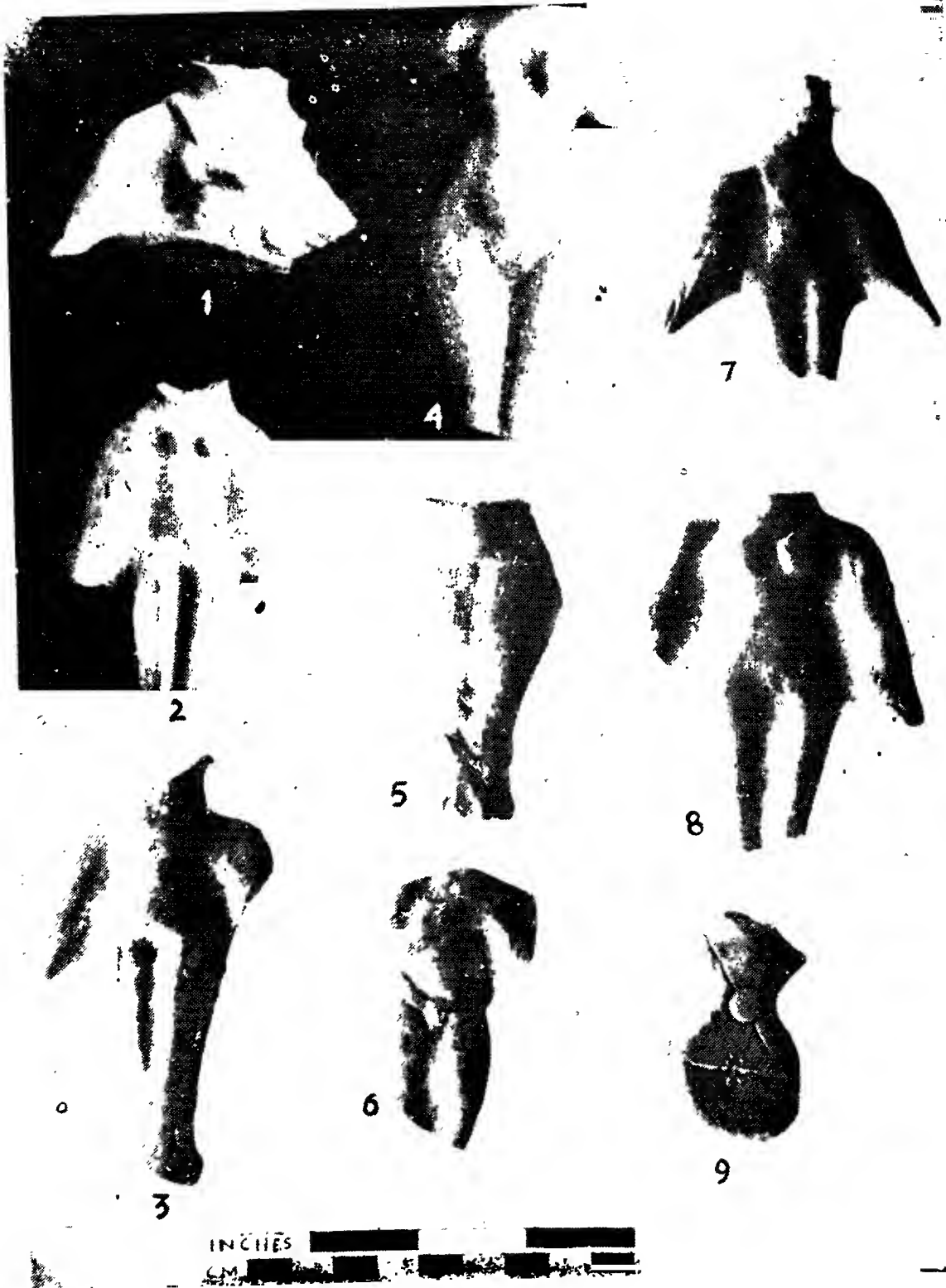


6

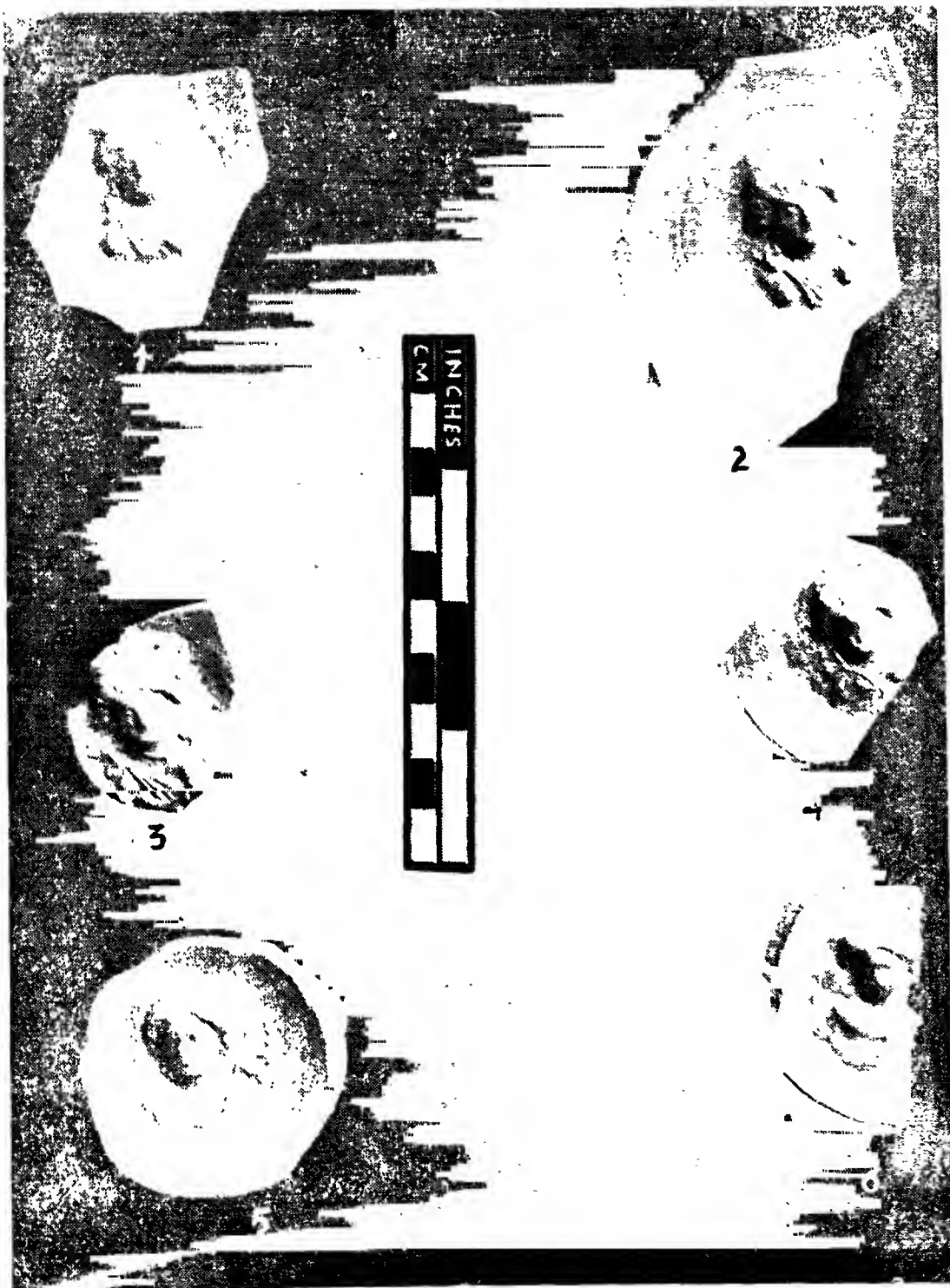


7

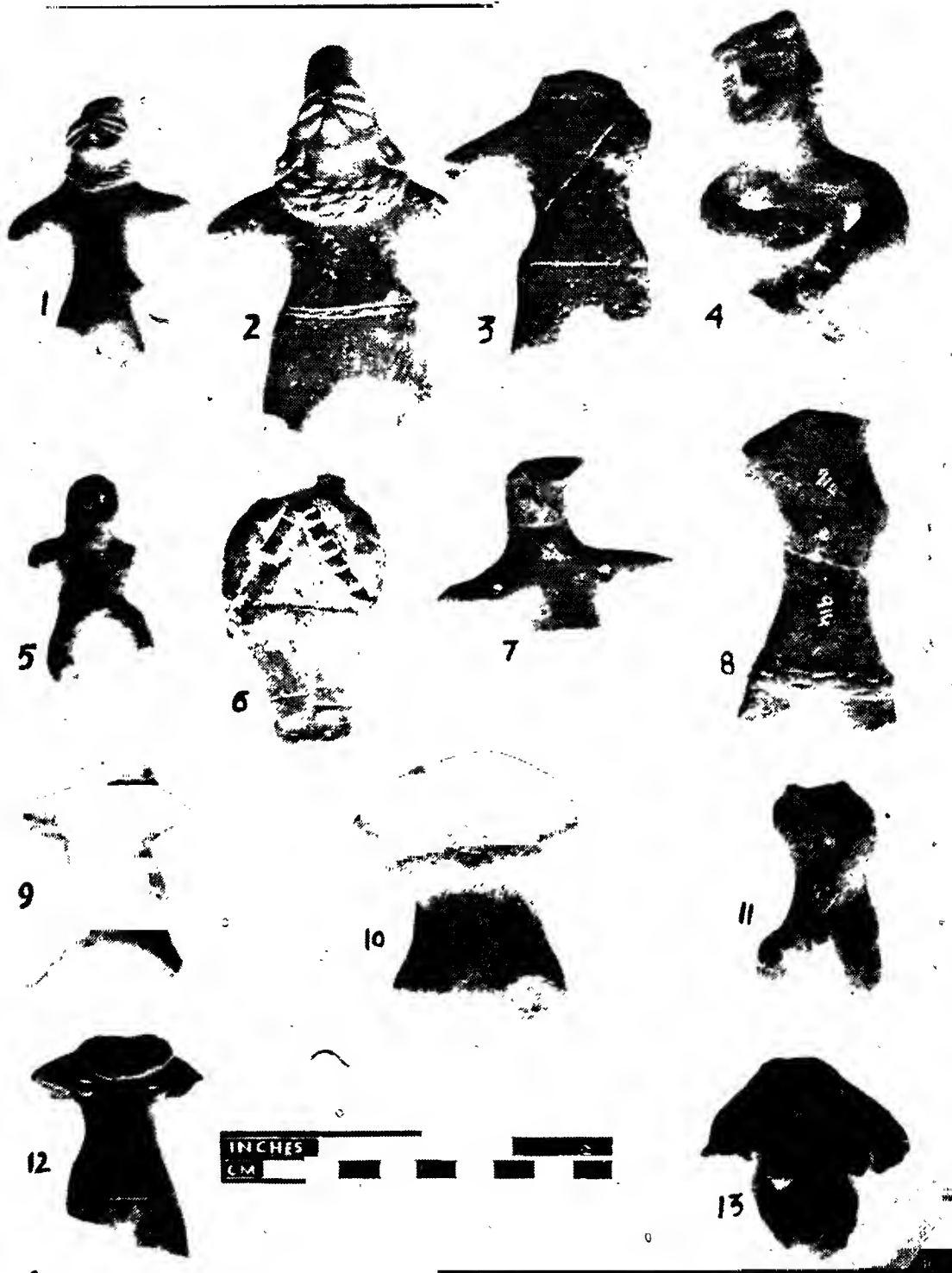
Moulded terracottas



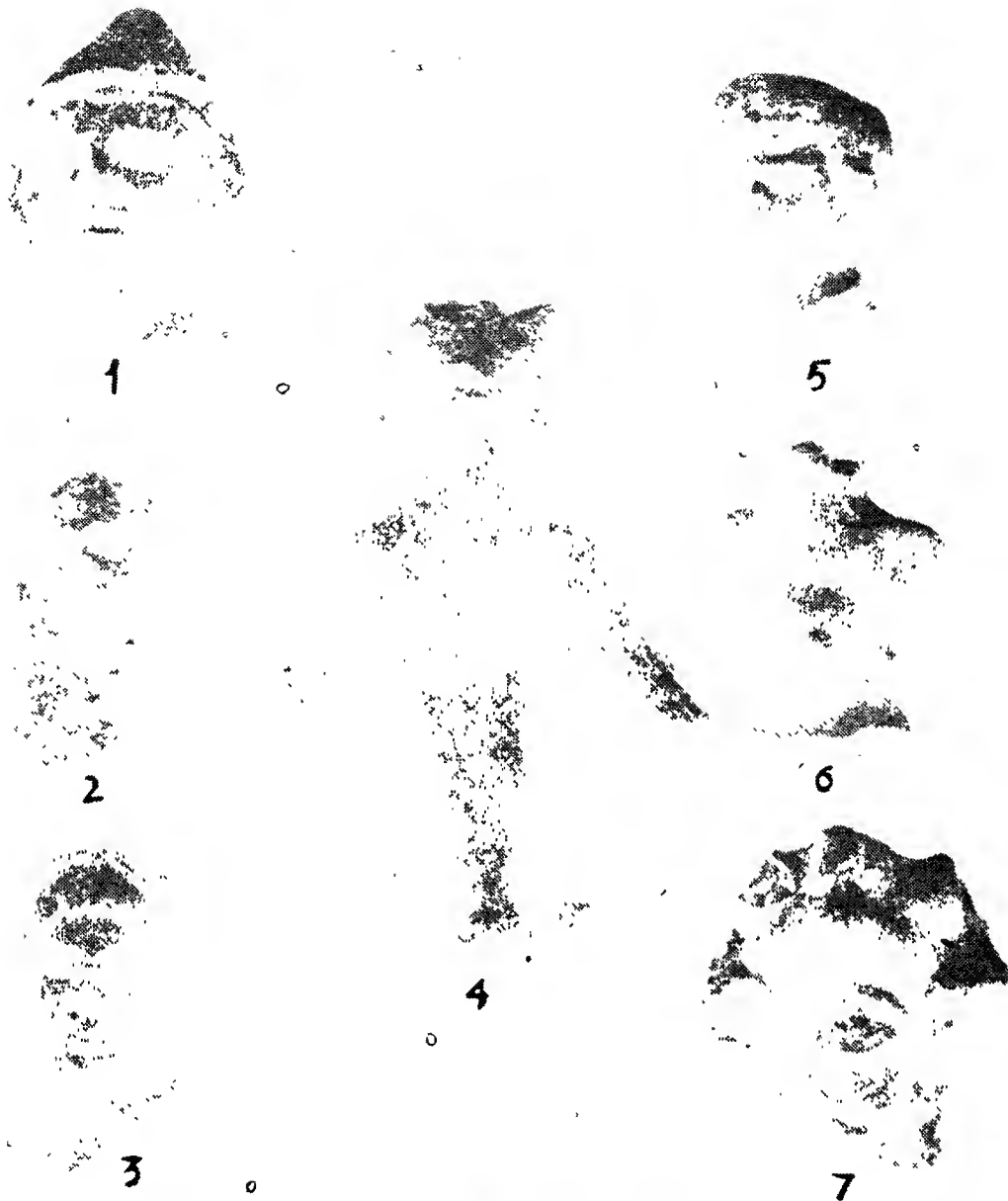
Human terracottas



Emblemata Figures



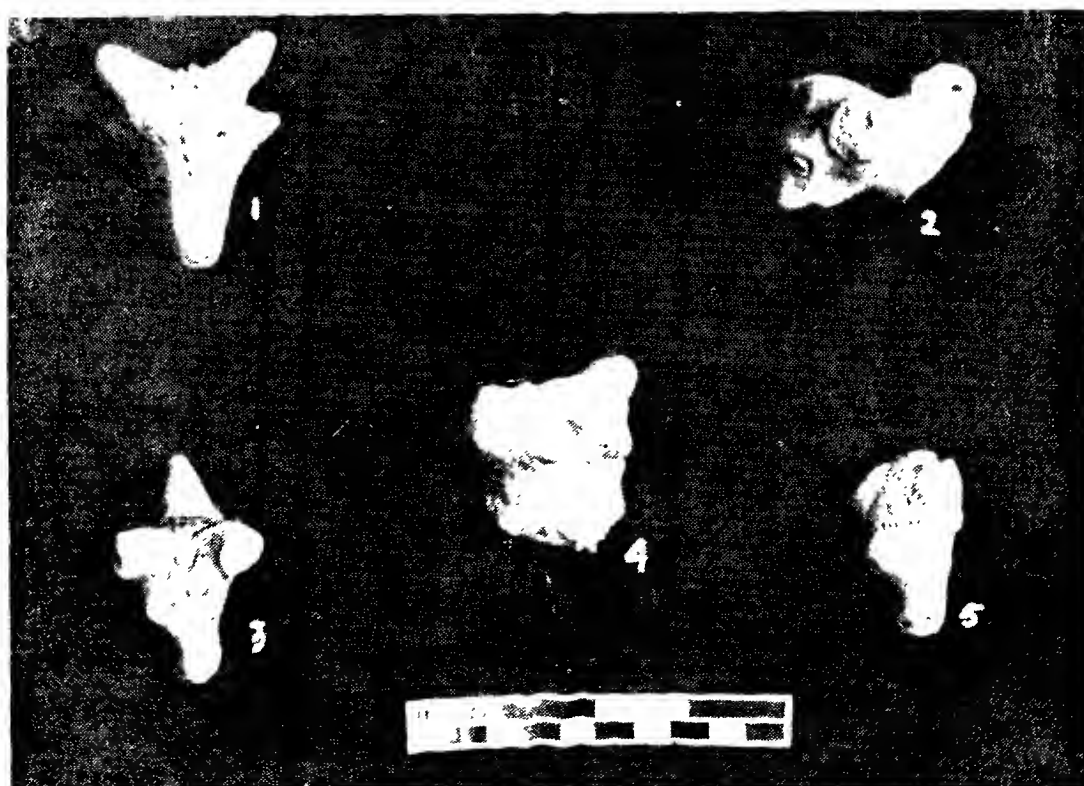
Human terracottas



Moulded terracotta figurines



(a) Terracotta bulls



(b) Decorated terracotta bulls



1



2



3



4



5



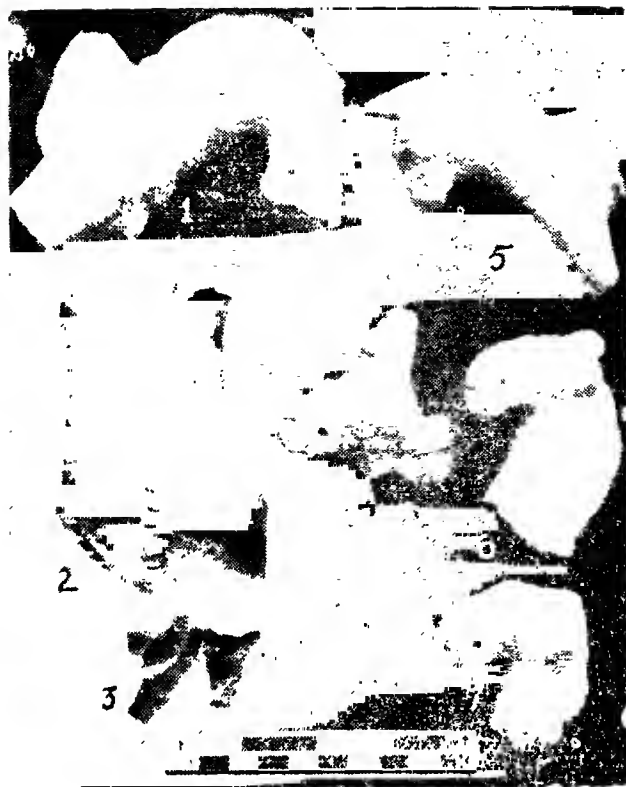
6



Terracotta bulls



(a) Terracotta bulls



(b) Horses



(c) Saddled horses



(a) Terracotta dogs and elephants



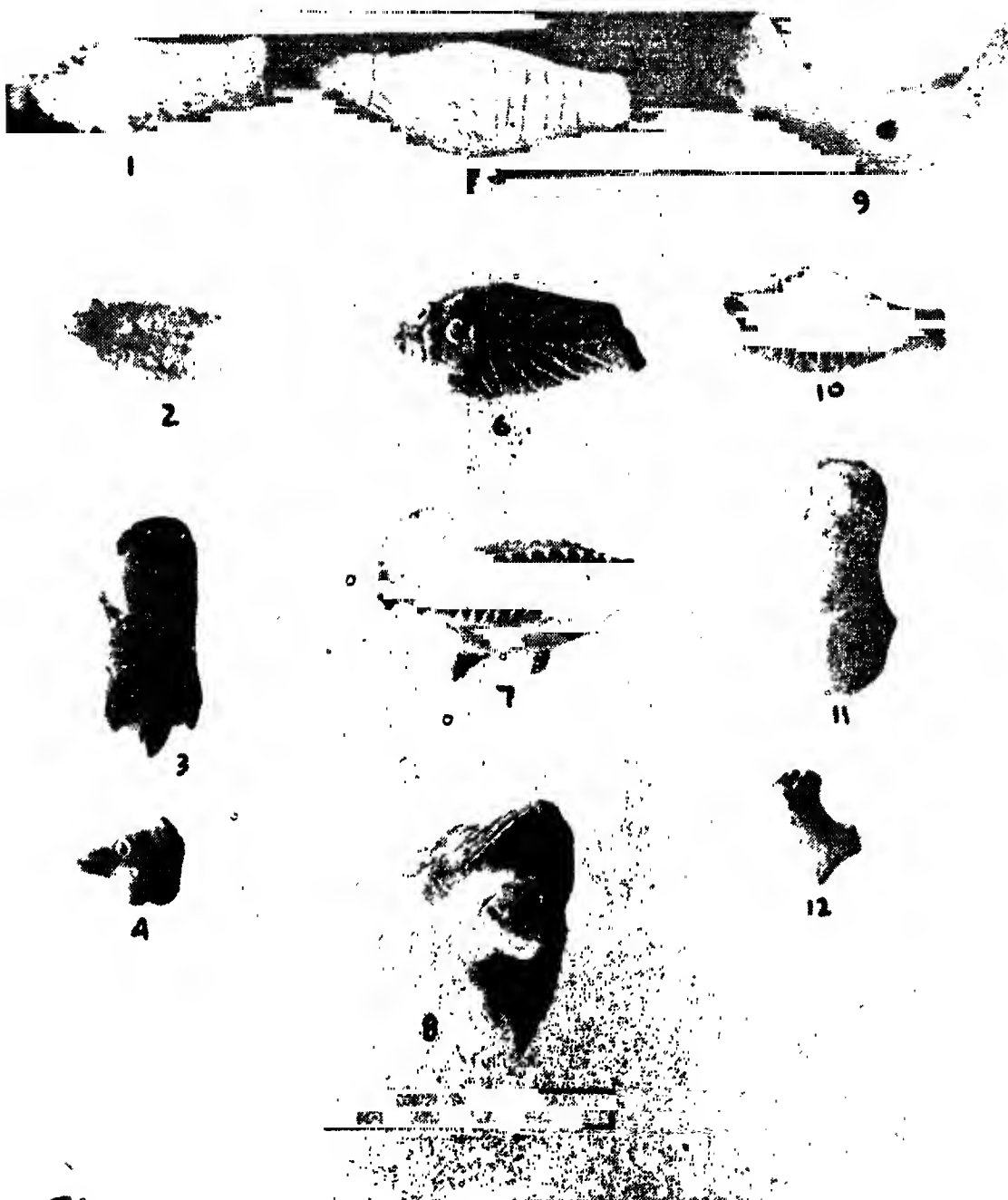
(b) Terracotta camels



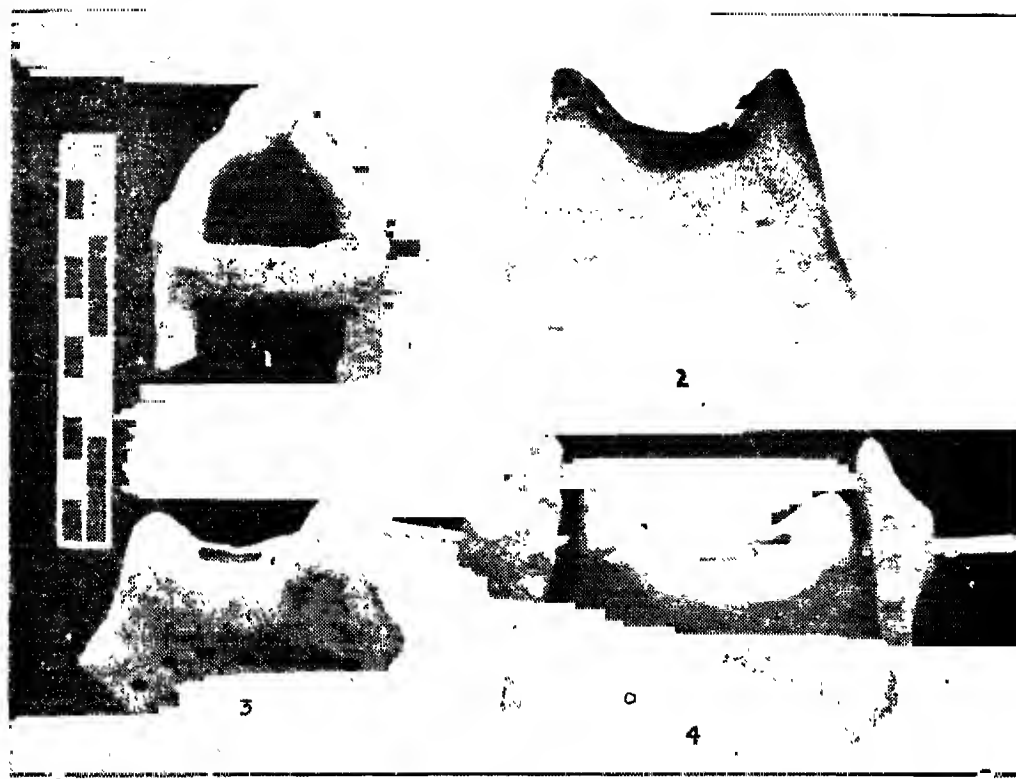
Terracotta monkeys



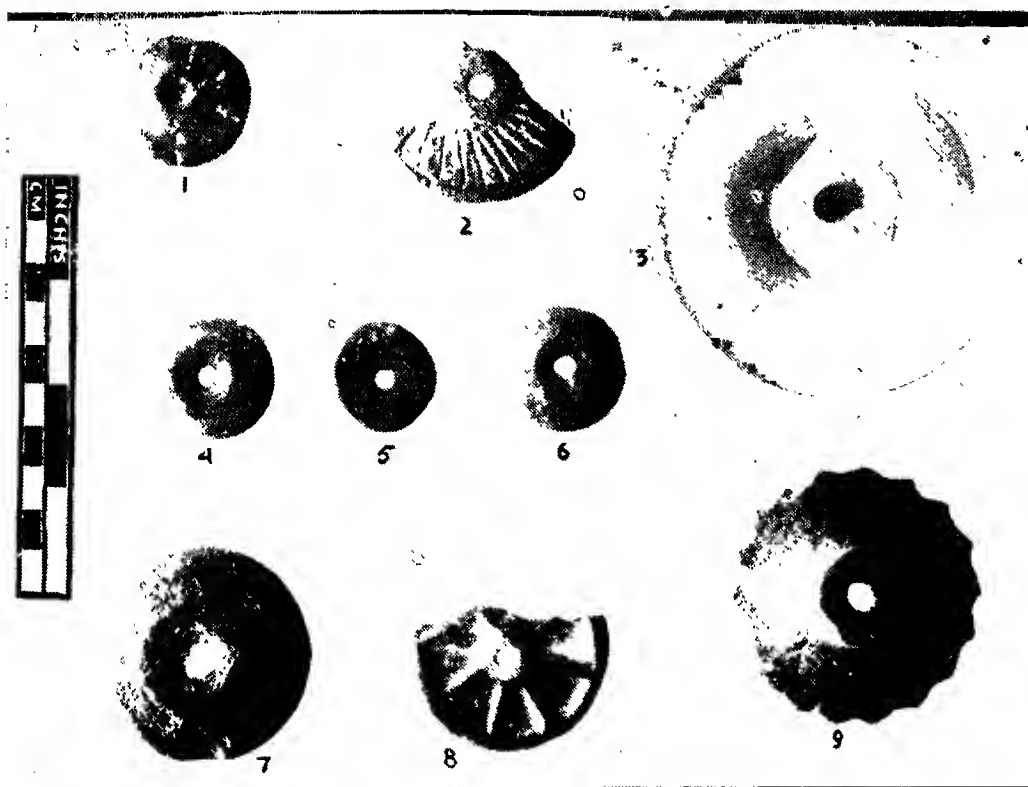
Terracotta animal figures



Fossil bird bones



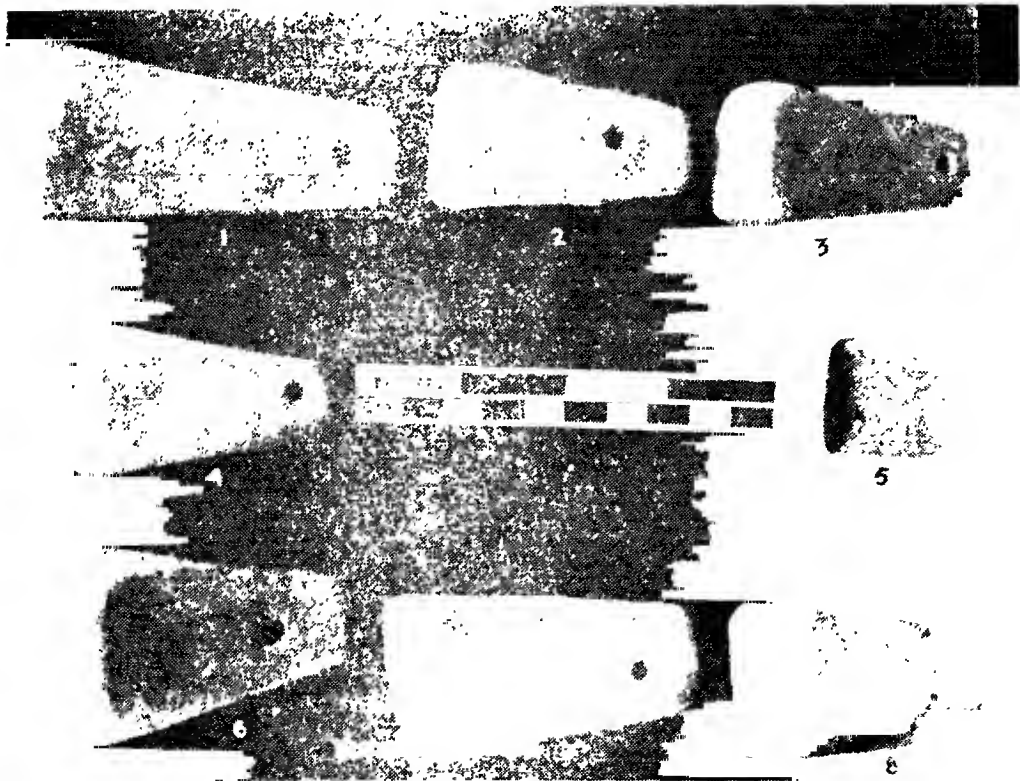
(a) Toy carts



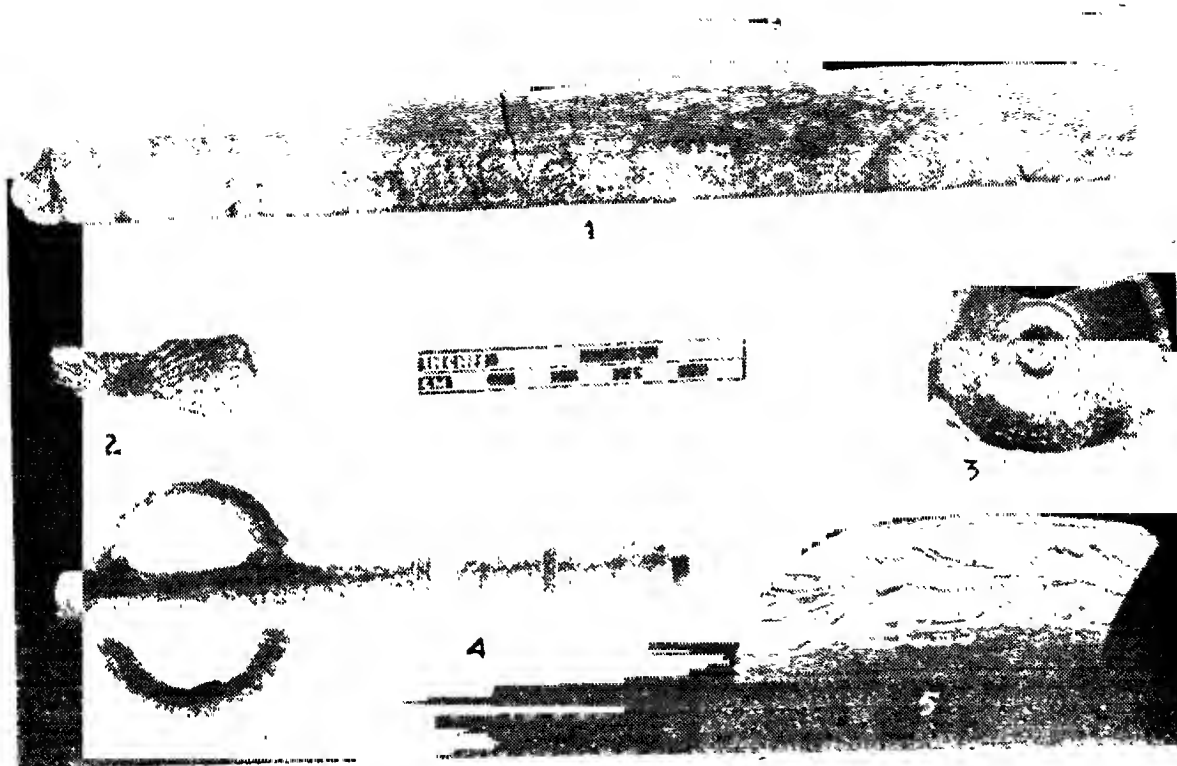
(b) Terracotta wheels



(a) Dabbers, rattle, gamesmen



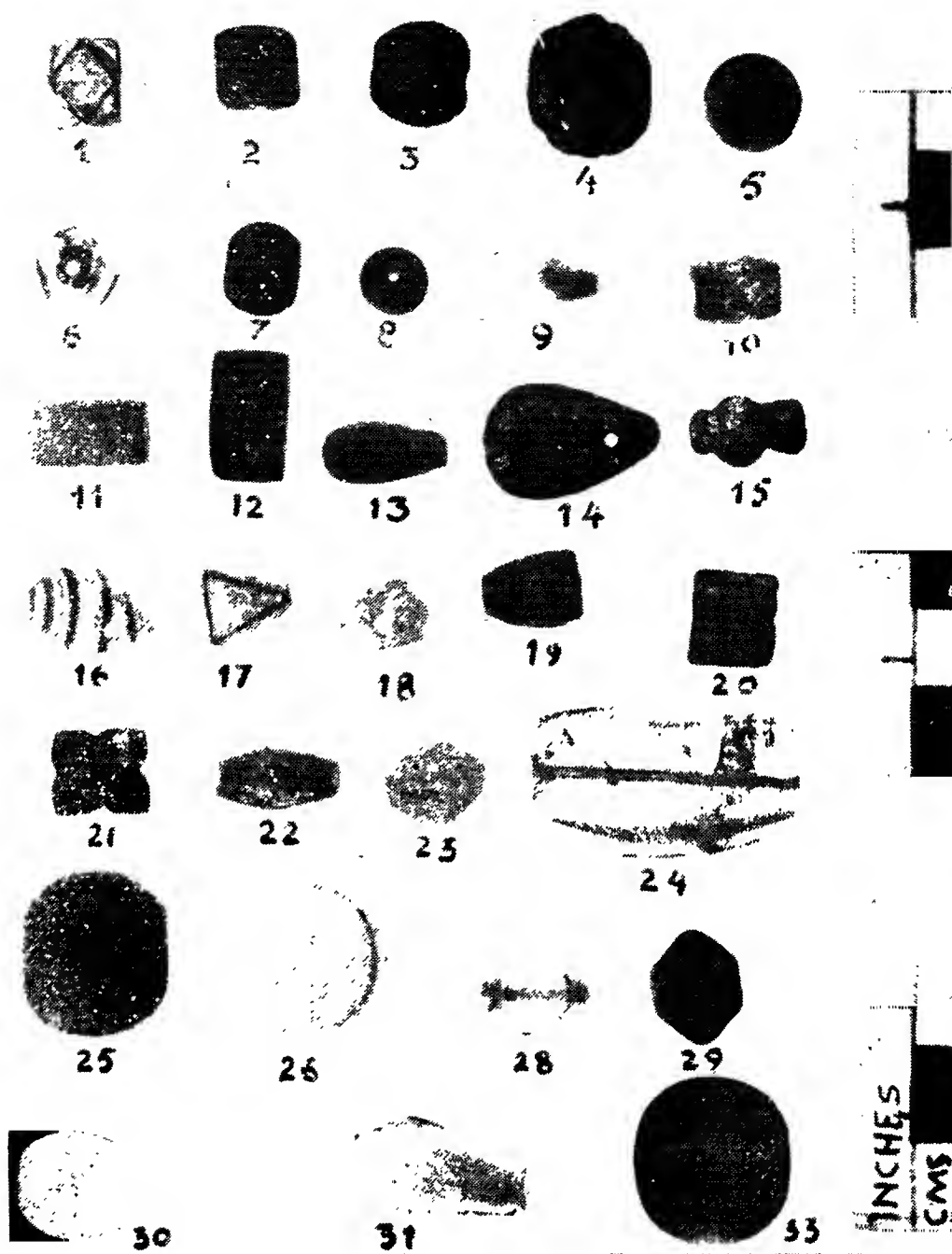
(b) Weights



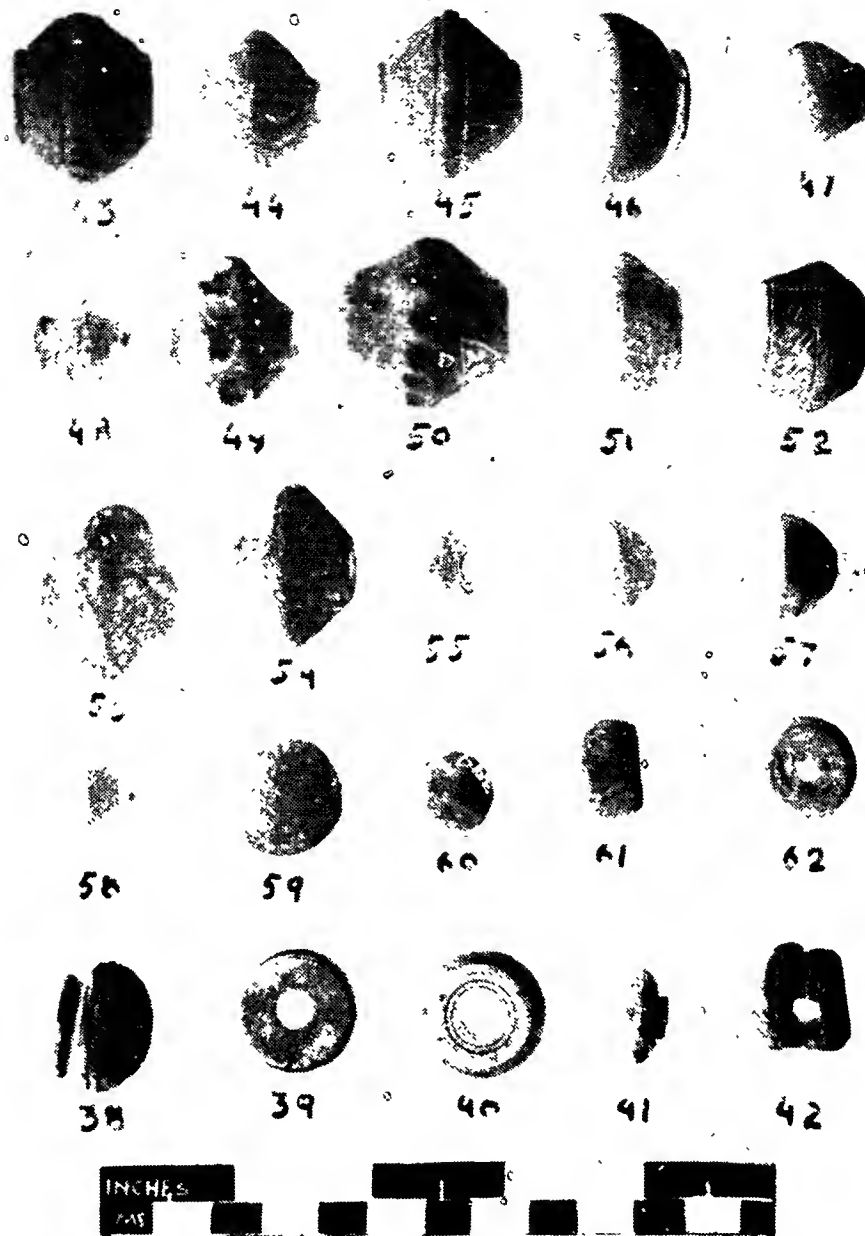
(a) (1) Sharpener (2-5) Turned stones



(b) (1, 3, 5) Seal impressions (2, 4, 6) Seals



Beads



Beads



1



2



3



4



5



6



7



8



9



10

Objects of glass and bone



1



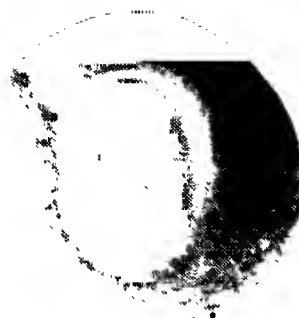
2



3

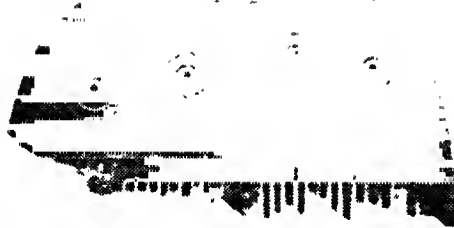


4



5

Terra-cotta seal impressions



1



2



4



5



3



6



7



8



9



10

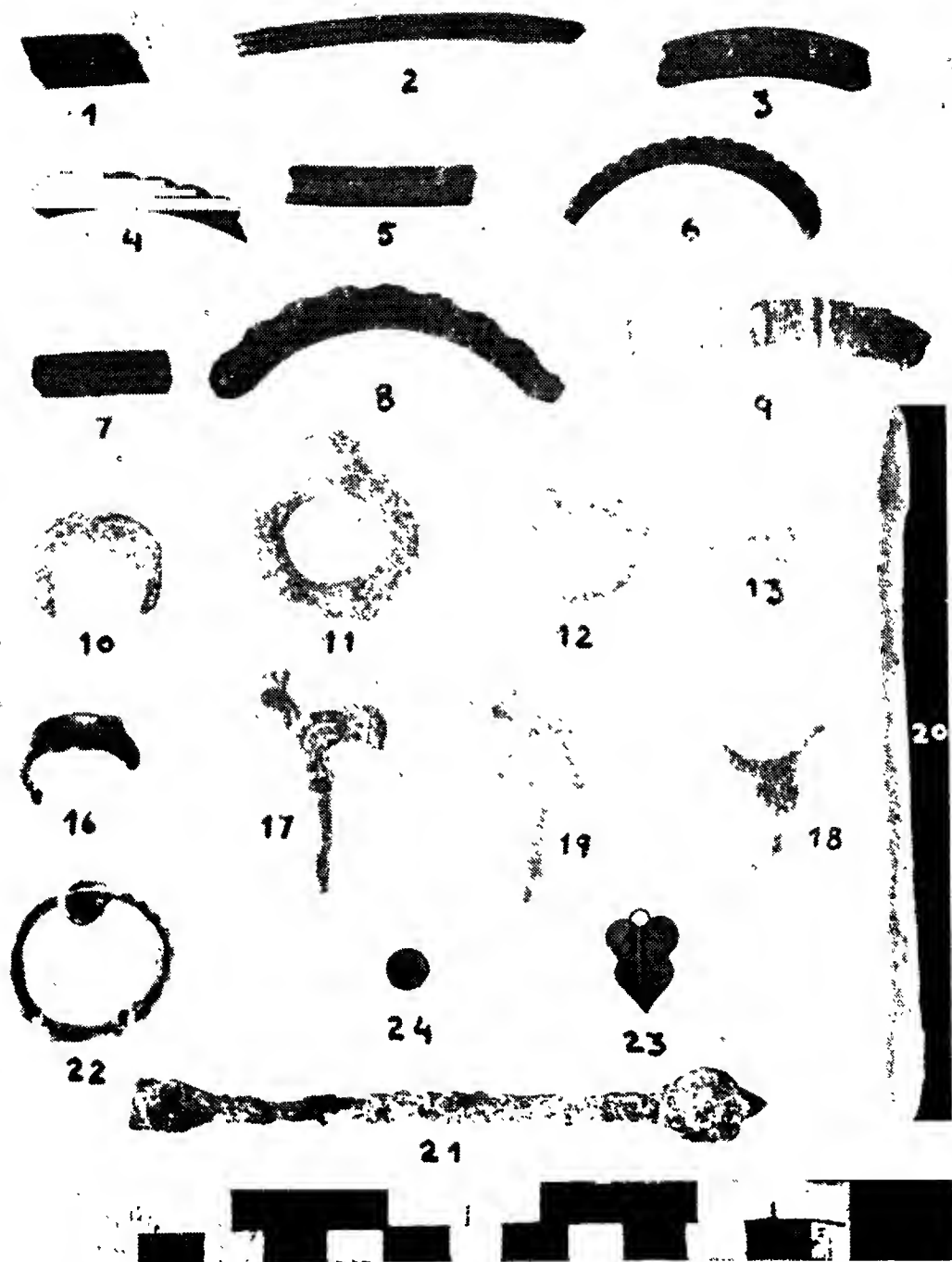


11

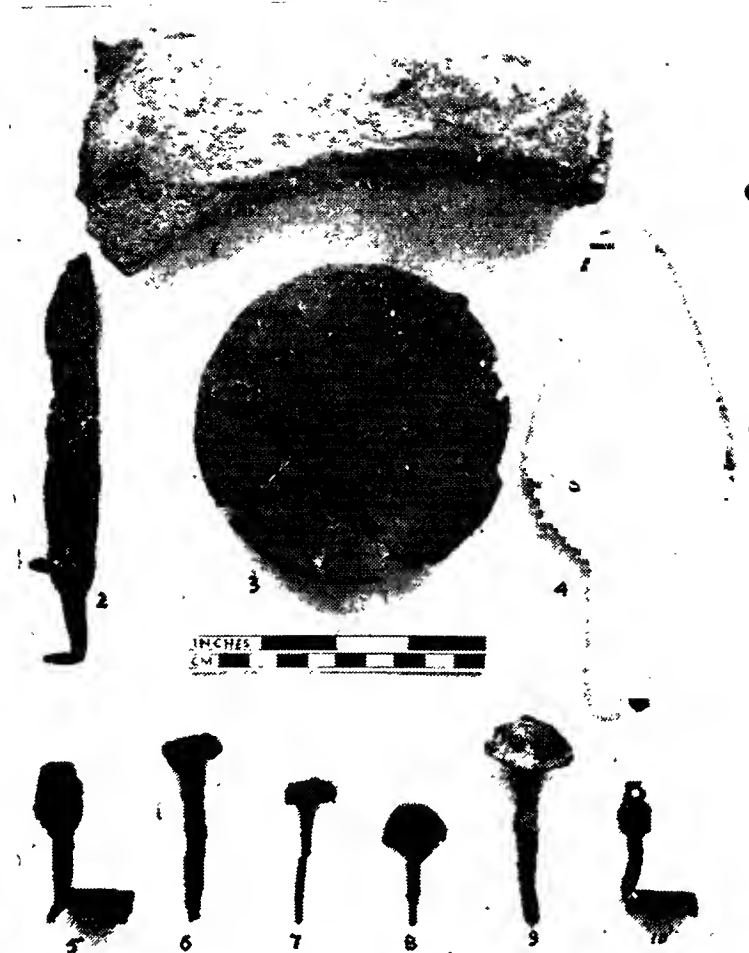


F

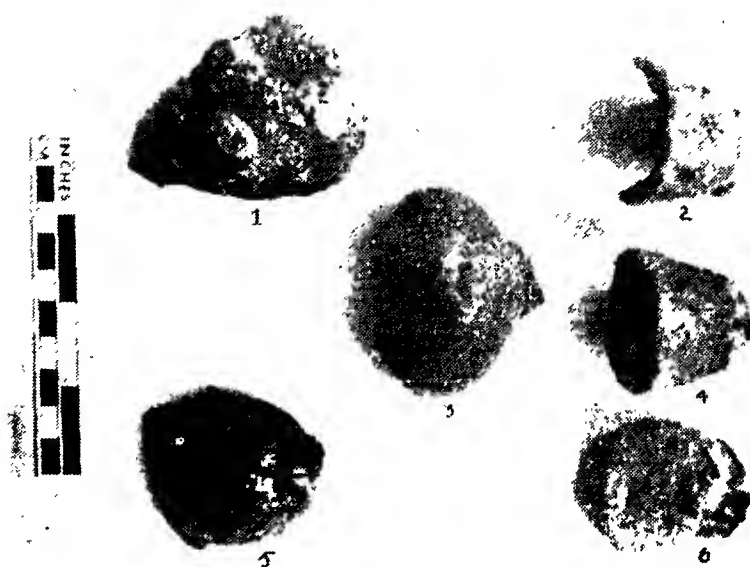
Ivory objects



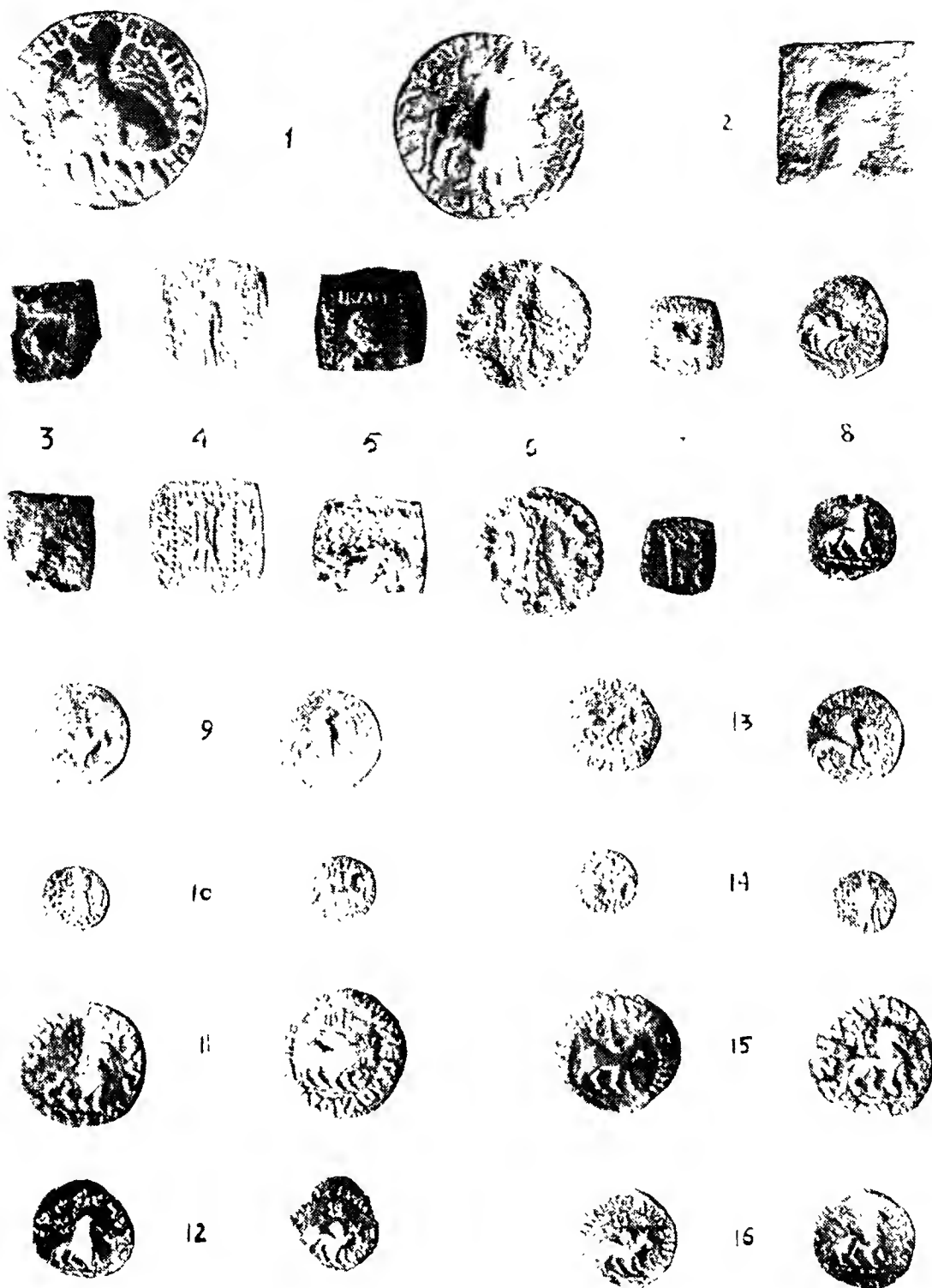
Ornaments



(a) Iron objects



(b) Crucibles
Pl. L



(1) Wima Kadphises, (2 and 7) Menander, (3) Agathocles, (4 and 6) Apollodotus, (5) Heliocles, (8-16) Azes

was built of burnt brick and belonged to the last period of the Kushana phase. In 1964 excavation pottery drain (pl. XIII, No. 2) was discovered. Such brick constructions were noted only in this last period of city's life. We will note more about them later. Meanwhile it may be recorded that in group F we recovered a small area of brick flooring (pl. XIV, No. 1) in the street, the burnt bricks, 9" square, were laid flat on the ground. Near the street was a foot-print (pl. XIV, No. 2) of a child on a mud-floor of the last period. Such mud-floors were observed in this period in other trenches as well. In trench B1 three made-up floors were noted: the top one of hard earth, the middle one of besmeared plaster of 30 coatings and the lower floor had sandy material mixed with clay. On the second floor was found a copper coin of Vasudeva and on the third that of Huvishka. In other places cobble floors (see group F,) were noted, but such floors were found generally in the pre-Kushana levels.

A visit to 1963 excavation:- We stand at the northern end of the eastern street, which is 15' wide and is aligned by diaper stone walls of houses on either side. Looking to the south, at a distance, we observe the majestic heights of the Bala Hisar mound. Right straight to the south, on the left side of this street, we lower down our view to the circular ruins of a Buddhist stupa (already noted). Coming nearer we see the brick flooring in the street in an area marked F in the plan. Not far away is a sokage pit made of a large open-mouthed pit. Into this pit discharges a stone-built drain 6" wide which comes from a rectangular bathing place (pl. XIII, No. 1), 4'-4"x2'-10", built of flat bricks, each 11.5 inches square: twelve flat bricks in the middle, one brick at the head and the margin bordered by brick-on-edge. This bathing place belonged to the last period of the Kushana phase. Of an earlier Kushana period two stone rubble walls go across the drain. These walls lie on the top of a Scytho-Parthian period well, 2' 6" in diameter, made of brick. We may not forget to notice cobble-floors in the nearby rooms. Coming nearer to the area marked E we see the deep level dig (described below) inside the shaded walls of the Scytho-Parthian period. Earlier walls of the Greek period, made of stone diaper masonry resting on mud-brick foundation, can be seen below, and several pebble floors cut through by the excavators until we reach the water level. In a nearby room of mud-bricks of the Kushana period we note a square fire-place, 1'-5" square, placed in the middle just in the same fashion as we see in modern Pathan houses. Into this fire-place were thrown several animal bones, suggesting the eating habits of those people. Coming back to the street we notice several shapes of refuge pits full of ashes, charcoal and bones. Why such pits are in the street cannot be explained. But when we realise that they all belong to the late Kushana period, we can understand the decay of civic life in this late stage of the city life when the main population shifted to another site on the eastern side of the river Zinde. There a long winding drain approaches towards us and drops into a square cess-pool. The street right at our feet was dug deep to the foundation of the wall on the right. Contemporary to this long drain was a mud-brick pitching, observed to the east of the cess- pool. Earlier several times the street was made up of hard compact gritty earth.

We now walk over the exposed structures going to the west, marked A, B

and C in the plan. Right in the middle a thick stone diaper wall goes right across to the west. This stone diaper wall (pl. VII, No. 1) 3'-4" thick, narrows down to 2'-6" in group C. Outside this wall in group A there is a fire-place, made of a big broken pot. There are several cross-walls of a later period that join it and form rooms with other walls going east and west (pl. VI, No. 2). The general picture shows mud-brick foundations deep down into an earlier pit wherefrom building stones have been removed. Over these mud-bricks are rubble make-ups, on which actually rested the proper wall of stone diaper. Two cross walls overlie a well, 2.15 feet in diameter. (pl. XV, No. 1), made of brick. It was in rooms, Nos. 4 and 6, that deep diggings were undertaken right down to the Greek level and a number of Greek coins were found here. The area marked C, which gradually slopes down to the west, had a thick deposit of alluvial clay and sand layer on the top, suggesting that at some date flood water had entered up to this point from the north-west. Below this level there were a number of pits containing burnt material and charcoal. Its meaning was not clear here until we started excavation in the area marked D. Before we pass on to that area, we must not forget to see another brick wall, 3.1 feet in diameter, underlying a wall of the Kushana phase, thus indicating that it belonged to the Scytho-Parthian period (see cross-section through B5 in Fig. 5). It was on the eastern side of the well that a group of nine coins of the Parthian ruler Azes II was found. In room No. 30 another deep digging was done. In this deep digging was found a square copper coin of Menander (type No. 512 of *Punjab Museum Catalogue*) buried in the mud-brick floor (layer (13)). Outside the western wall ran a straight street, 16'-6" wide, parallel to the one noted earlier.

House of Naradakha: Now we come to the area marked D, which we have named as 'The House of Naradakha', a Buddhist *acharya* (teacher) whose name was recorded at the base of a pedestal (pl. XXII,) belonging to a relic casket. This house (Pl. VIII, No. 1) is very well preserved and gives a fair idea of a Buddhist teacher's residence during the hey-day of the Kushanas. The house was in existence from the earliest time of the Kushanas right to the end of the period. During the six generations of the Kushana rule the house got burned twice (pl. IX, No. 4) but every time it was repaired and restored. The history of the succeeding generations is amply recorded in the different strata, firmly dated by the discovery of a number of coins.

As seen in the plan the house consists of a central open courtyard with rooms on three sides, the fourth side was closed by a high dividing wall. The main entrance was from the street with the doorway having rounded corners. It led into the gate chamber No. 33. Right in front is a brick wall of a later period belonging to room No. 32. This wall shows three chases (pl. IX, No. 3) for wooden pillars. From the gate chamber we pass on to a long passage. At the western end of the passage was placed a mill-stone (pl. X, No. 1). The eastern side opened into the courtyard No. 27. At the north western corner in room No. 31 a number of mill-stones were found. Underneath this floor was a drain coming from the courtyard and going towards the street (pl. VIII, No. 2). Facing the courtyard was room No. 28, which was later turned into a shrine raised on a platform. A stepstone led into this shrine. Room No. 32 was built to serve some religious purpose. A door

from the courtyard led into the store room No. 23, which provided an access to room No. 24, later turned into a bathroom. The whole house underwent three changes in its purpose. Originally it served merely as a residence of the Buddhist teacher when in the central courtyard there was a bathing place (pl. IX, No. 1), made in the same fashion as noted earlier, connected by a stone-built drain that discharged into the street. This was the period of the Kushana ruler Wima Kadphises when large-scale reconstruction was undertaken at Shaikhan Dheri over the ruins of the Scytho-Parthian period. The second phase of this house began after the death of the teacher, which probably took place during the early years of the reign of Kanishka. Now the purpose of the central courtyard was changed. The bathing place and the drain were closed. Relic deposits were now made here, one of them was right over the earlier drain, placed under a tre-foil arch (pl. VIII, No. 3). It is in this period that several sculptures (pl. XVI, and XVII.) were introduced into the house. But unfortunately the house got burned in A.D. 93 (radio-carbon date) and beams of burnt wood got buried in the court-yard. With the ashes and charcoal were found above-noted sculptures, broken and scattered here and there. The house was rebuilt, floor-level raised. Room No. 24 was turned into a bath-room with fine rubbed brick pitching in its floor. Room No. 23 served as a store, where three big storage jars were placed on a platform (pl. X, No. 2), along with a narrow-mouthed vase and a large basin in front of a stone seat. The big jars were, no doubt, meant for storing wheat flour, the vase for bringing water and the basin for kneading. Quite in keeping with this purpose of the store, in room No. 31 as well as in the passage between this room and the gate chamber 33, a number of wheat mill-stones (pl. X, No. 9) were found. Room No. 28 was rebuilt as a raised platform with four wooden pillars at the corners probably to support a canopy. But again the house got burned either towards the end of the reign of Huvishka or early in the time of Vasudeva when the third phase of the house started. The main entrance towards the street was now closed by a brick wall or probably the level was raised higher. In this brick closing was found an elephant rider type copper coin of Huvishka. The new reconstruction was all in burnt brick seen over the top of earlier stone diaper construction. Room No. 32 was entirely re-built with brick, the walls (pl. IX, No. 3) showing chases for wooden pillars. Room No. 28 was now a complete shrine in which, in the middle, was installed a high seat. The seat was plastered with lime and was originally decorated with stucco figures, very fragile. On this seat was a figure of Buddha, whose head (pl. XX, No. 1) we were lucky enough to find. The house had now become a veritable temple complex. But that again could not last long. The house seems to have been finally burnt and destroyed. Thereafter the house of Naradakha lay flat till the excavator's spade revealed the story. The teacher, who was remembered for six generations and whose house became sanctified later, lay hidden in the limbo of oblivion under the debris of Shaikhan Dheri like many others about whom we know not. What a collection of proffered coins, galaxy of sculptures, store of wheat flour and the installation of the Buddha figure himself — all to the hallowed memory of the teacher who kindled the light of teaching but at the end all lamps got extinguished with the abandonment of the city.

1964 Excavation: We come back to the northern side of the eastern street, where we had started before. Looking eastward, we observe the long trench of 1964 excavation, (pl. VI, No. 1) which follows the contour of the mound as it slopes down eastward until we reach the alluvial deposit in the gap opening from the north. This long trench down the slope was laid with two main objectives: (1) to find out the main street running from north to south, and (2) to get more information about the Greek levels in the lower area. While the first objective was achieved, the second was not so well rewarded because of the removal of the materials from the earlier period structures. This ancient robbery is writ large throughout the excavation of this long trench. The main street (pl. XII, No. 4 Fig. 3), measuring 33 feet, was discovered at the extreme eastern end, 208 feet east of the last street. Fortunately we hit upon a corner of a house (pl. XII, No. 3) at the junction of the side street with the main one but we had no time to follow the side street. Of the structures nothing spectacular was noticeable. The walls followed the old alignment and were built in the same fashion. The Kushana period walls were found in the top levels while further down this period construction was flimsy. There it was a period of levelling up and huge debris deposit. One remarkable find of this period was pottery drain pipes (pl. XIII, No. 2) in trench A7'. Below the debris were found remnants of Parthian period walls in trenches A5' to A10'. In the last trench by the side of a thick wall were placed a series of tall pointed bottom storage jars (pl. XI No. 2). Underneath the Parthian period construction we can see the Greek period walls of stone (pl. XII, No. 1) and three floor make-ups (pl. XII, No. 2). On one of them are placed two tall storage-jars. In the nearby trench was found a pottery well (pl. XV, No. 2) in the Greek level.

In order to confirm the evidence at the lower level digging the main street was traced south-ward, and after leaving a gap in the middle the excavation was started again in trenches I8', J8', K8', I9', J9', K9', I10' and K10'. But the same story of levelling-up and debris deposit in the Kushana period was repeated here. It was in one such debris layer No. (3) in trench J8' that a gold coin of Wima Kadphises (type: bust of the king on the obv. with Greek legend and Siva and bull on the Rev. with Kharoshthi legend), used later as a button, was discovered. Deep digging in trench K9' revealed a Greek period brick well 6.3 feet in diameter (pl. XI, No. 1) and another Parthian period well 1.11' in diameter. A jar with three legs had slipped down from the Parthian level and was lying beside a Parthian period wall. It was here in the make-up of the layers underneath this wall that large number of human terracottas ('baroque lady type') were found. From this place also came the terracotta figurine of a cupid (pl. I).

Stratigraphy: Before we describe the deep cuttings and the make-up of the different layers, it is well worth noting the main features of the different periods as distinguished by the succeeding occupation deposits. The note must be premised by a clear statement that there has been no break in the occupation of the city since it was founded in about the middle of the second century B.C. on an alluvial soil. The passage from the Greek to the Scytho-Parthian levels does not show any large-scale destruction and, as we have

said before, the Scytho-Parthian forms a single period. Greek period walls of stone diaper masonry were found in D1, A1 and A9' but they were rather flimsy. The Parthian period walls are much disturbed and the building stones have been re-utilized later. But there is a clear evidence of destruction at the end of the Parthian and the beginning of the Kushana period. Thick layer of pottery deposits and levelling up with debris are seen in the time of Wima Kadphises throughout the excavation. It was this Kushana ruler who rebuilt the city but later in the time of Kanishka the city shrank. In the lower levels no construction of the later Kushana periods has been traced. Thus there is no stratigraphic break in the life of the city and as such we find the same types of pottery, terracotta and other materials continuing through all the layers. Side by side with the older types, new varieties and additions come in the later periods. For example, the 'baroque lady' type of the human terracottas continues through all the layers though in the earlier levels this type is better in workmanship and greater in number. From the Scytho-Parthian period we begin to get moulded terracotta figurines of entirely different type. In the middle Kushana period we get the Gandhara type of the terracotta figurine, and it is in this level that we find the Gandhara sculptures in schist.

Deep Diggings: Trench D1 (Fig. 5).

In the area, formed by the trenches D, E and F, the story in the upper levels was similar. The surface was flat strewn over with pot-sherds, apparently suggesting that this was an undisturbed space. But our excavation revealed several pits, two of them are shown in the section. Immediately after removing the top soil one oven full of ashes was located in layer (2), and not far from it a thick line of charcoal. The meaning of these finds were not clear until we dug down to layer (4) where in one corner we met with a human burial 5'-2'' from the surface. This was a modern Muslim burial, the recognition of which easily explained the great disturbance in the upper layers. The oven and the charcoal streak were all related to this burial. The find of a Muslim skeleton was rather disturbing as we never expected to find it here. We were digging far away from the modern graves. The local labourers also had no recollection of this area being ever used as graves. But our excavation produced more of such graves, the bones of which were removed in all humility and buried elsewhere. We learnt a lesson that this upper area may have been used as a burial place by an earlier Muslim population, whose memory is now faded.

The first two layers were full of pottery and ash. Besides the oven, we recovered one iron nail, an ivory bangle, two pieces of black-polished ware, a terracotta lamp and a terracotta seal with lotus design. The layer (3) was a hard compact earth, still preserved in one corner. It formed the latest floor level. In this layer we got three copper coins, two of which belonged to Vasudeva I and one to Kanishka I. Layer (4) was made up of comparatively loose earth with several ash pits. In this layer was found one copper coin of Wima Kadphises, and another of Huvishka (elephant-rider type). Layer (4a) was again a compact filling above loose ashy layer (5) which formed the second floor level. Several copper coins were picked up in these two layers.

The recognisable ones belonged to Wima Kadphises and Soter Megas. Layers (5a), (5b) (not shown in this section) and part of layer (6) were all hard compact fillings, full of potsherds and other debris. They were lying over a third floor level full of ash and charcoal. The coins from these layers, which were identified, belonged to Wima Kadphises and Soter Megas. Thus the three floor levels, discovered in this section, were assigned to Early, Middle and Late Kushana periods on the basis of the coins.

Underneath the Kushana floor level of the early period there was a thick ash and charcoal layer (7) full of pottery which lay over a loose debris filling (8) yielding large number of saucer-shaped complete bowls. The debris covered the remnants of a stone diaper wall (not shown in the section) which rested on mud-brick foundation. No floor make-up was observed. Layer (9) consisted of alluvial clay with bits of charcoal. Its top marked one sub-phase, distinguished here as period IVA. Underneath this layer was a deposit of clay and sand mixed with river pebbles, layer (10). It is possible that this was a flood deposit. It struck against a stone diaper wall which belonged to the Scytho-Parthian period. This wall was resting on an earlier diaper wall coeval with layer (11). In this layer was found a copper coin of the later Greek ruler Telephos. The stone diaper wall continued all round and made a room. This was the last building phase in the Greek period. The mud-brick foundations of the stone wall continued through layers (12), (13) and (14) and rested on a pebbly layer (15) mixed up with loose earth and charcoal. It appears to be a floor make-up. Underneath this was the loamy soil which deposited on an earlier floor made up of pebbles mixed with alluvial soil. In this last layer (17) we obtained a copper coin of Agathocles. This was the earliest floor found in the excavation. The water level was at 42'-3'' on 28th November, 1963.

Trench B5 (Fig. 5).

This trench was laid on the north-western slope of the area selected by us for excavation. It was nearly 5 feet lower than the flat space in D1. In the nearby trench A5 sand and alluvial clay deposit on the top suggested flood intrusion from the western side along the line of a cross-street, recognised further down in 1964 excavation. Apparently the latest layers were washed away. Therefore the numbering of the layers in this trench does not correspond with the numbers in trench D1. The remains of the Late Kushana period were also not found here. Layer (1) showed ash and charcoal burning which continued in a deep pit laid against two layers of loose earth and debris filling making up strata (2) and (3). In the pit was found one copper coin of Kanishka and in layer (2) another coin probably of Kanishka. The debris layers struck against two walls made of rubble stone resting on mud-brick foundation which reached the top of an earlier period well (pl. XV, No. 1). The rubble wall does not appear to be proper wall. It was only a foundation make-up. The proper wall was always of stone diaper, which has disappeared. The next layer (4) was made up of loose earth and fallen materials consisting of burnt bricks which appear to have belonged to the well of this period. This well was contemporary with a stone diaper wall resting on rubble foundation. The well and the wall were the constructions of the early Kushana period. This stone wall continued in other trenches and formed

the base of the House of Naradakha, thus providing a firm chronology to the beginning of that house. The well was dug down to the water level but except for pot-sherds no other spectacular find was obtained. The water level was found at 42'-3" from the datum line, the same depth as was noted in the earlier case.

Lower down layers (5) and (6) were compact fillings which yielded very little pottery. In layer (6) a small pot was found having nine coins — 2 of silver and seven of copper, all belonging to Azes (pl. LI Nos. 8-16). The find of these coins and other associated materials gave us a firm evidence to attribute layers (5) and (6) to the Scytho-Parthian period. To the same period belonged layer (7) which yielded similar pottery and terracotta finds. The rubble foundation of the stone diaper wall continued to the bottom of this layer.

Layers (8), (9) and (10) were again grey earth fillings yielding nothing but handful of pot-sherds but they marked a definite change from the occupation of the Scytho-Parthian period. These were fillings posterior to the real occupation layer (11) composed of loose earth, ash and charcoal, which sealed compact earth making layer (12). In this layer a copper coin of Lysias was found. On the basis of the occupation layer (8), (9) and (10) are relegated to period VA and (11) (12) to period VB. Below this layer was ash and charcoal mixed up with loose earth lying on the top of a well-built mud-brick floor. This was marked layer (13) and from this was recovered a copper coin of Menander. Underneath this floor the excavation revealed two more layers (14) and (15). The pot-sherds were few in number. The last three layers were relegated to period VI.

Trenches AO and A1.

Trenches AO and A1 were laid on a slope towards the north-eastern portion of the excavated area of 1963. The surface was about 5 feet lower than the datum on the top flat area in DEF trenches. The section is drawn from about the middle of AO to the end of A1. East of the section beyond the stone wall (shown partly in the section) was a street. The well projected in AO is actually away from the line of the section (see plan Fig. 4). It was not excavated to its bottom. The remains of period I were not found in these trenches. The top layer (1) was a washed earth deposited in the slope. Layers (2) and (3) were composed of loose earth, ash and charcoal and debris material. The stones had fallen away from the walls which rested on deep foundations. In layer (2) was found a copper coin of Kanishka. Both these layers formed period II. These layers completely sealed the well which actually belonged to period III. Its debris formed layer (4) which, in some places, was full of ash, traced down to the mud-brick foundation. In one case this foundation rested on an still earlier wall. The debris lay on a comparatively hard earth making layer (5).

Below this period there was a compact filling of two layers (6) and (7) which rested on loose earth mixed up with ash forming layer (8). In this layer was found the remnants of burnt brick floor belonging to a stone wall, which had only a few courses of stones left. This *Pucca* floor lay over pebbly layer (10). On the basis of the finds these layers were relegated to the Scytho-Parthian period IV.

Underneath the pebbly floor make-up of the Scytho-Parthian period there were several layers (11), (12) and (13) of clay deposit mixed up with charcoal yielding some pot-sherds. Layer (14) marked another floor made up of stone pebbles and green earth. In this layer was found a copper coin of Antialkidas. All these layers were assigned to period V. Beneath the floor was a reddish earth (15) in one trench and in the other trench yellowish soil. Layer (16) was mixed up with sand in one trench which rested on alluvial soil mixed up with pebbles, possibly remnants of a floor. It is in this layer (17) that a copper coin of Apollodotus was found. Below this floor potsherds were reduced and the work was stopped. The last four layers were relegated to period VI of the Greek phase.

Trenches A12', A11', A10', A9' (1964 excavation) (Fig. 6).

These trenches were laid in the gap made by the river intrusion. The surface was about eighteen feet lower than the datum of the last year. The main street was found in trenches A12' and A11', lying between the mud-brick walls on the east and west. The eastern wall, which was dug through from layer (4), goes down and rests on an earlier stone wall of the Greek period, thus establishing the firm line of the extent of the street on this side. No structure was found in the street, nor any drain, except fallen debris from the nearby walls, as is seen in layers (7) and (6). The street was dug to the depth of eight layers, of which layers (7) and (8) belonged to the late Greek period. The top-most layer (7) of the Greek period showed sandy deposit with water marks on the alluvial soil. This flood layer is carried also in trenches A10' and A9' and others whose sections are not published here. This evidence suggests that in this part of the city flood water intruded through the main street towards the end of the Greek period. In the next period of the Scytho-Parthians the surface was hardened by compact clay filling before building activity started. But again the end of this period was marked by flood deposit, layer (5). It was from A11' (5) that a copper coin of Maues was picked up. Over this flood deposit, in the next period, the street was made up of concrete and rammed earth, layer (4). But thereafter no proper care was taken to make the street, except throwing the rubbish from the houses (see several pits in the Middle Kushana period), or sometimes some pebbles were thrown in the loose earth. From A11' (3) one copper coin of Kanishka was obtained, and another of Wima Kadphises from A11' (4).

East of the street we had no time to excavate but west of the street we exposed the structures. Of the early and Middle Kushana periods we did not expect any structure, but the first three layers contained materials of the Middle Kushana period with a flimsy stone wall in A9'. Though the floor level of the early Kushana period was clearly marked by the remnants of brick flooring, no walls were traced in these trenches. The Scytho-Parthian period was determined by the find of large number of coins of Azes in A9' (5) A9' (6) and A10' (5); Azilises in A10' (5) and Gondophares in A9' (5). The western wall by the side of the street was widened by mud-bricks, near which was a long rectangular room. Outside the room were large number of storage jars, probably in a shopping verandah. Of the Greek period three different floor levels were found in association with stone walls resting on mud-brick foundation.

A silver punch-marked coin was found in A9' (9), three coins of Philoxenus from A8' (7) and from the same layer one of Heliocles, and two coins of Apollodotus from A9' (6). The find of these coins suggests that the last period construction took place during the time of the minor Greek rulers. A pottery well was found in A10' belonging to the earliest Greek construction. The layers below the construction were alluvial clay yielding some pottery, except layer (12), marked by ash and charcoal, suggesting the earliest occupation layer. Layers (15) and (16) were made of natural soil. The water level was found at 42 feet below the datum of the last year.

Trench K9' (1964 excavation, Fig. 7).

The surface of the trench K9' was about fourteen feet lower than the datum of the last year. In the surrounding area the surface was much disturbed by the modern builders. Muslim graves lie close to its east and south. Modern rough rubble constructions, found in layer (1) and top of layer (2), were removed to go down to the earlier levels. Layers (2) and (3) were loose earth mixed with ash and pottery. In K9' (3) one copper coin of Huvishka (elephant-rider type) was found, thus determining the last three layers as Middle Kushana. Layer (4) was hard clay mixed with concrete and pebbles. Layer (5) showed the flood marks on alluvial clay, indicating a close resemblance with the same layer in trenches A12' and A11'. Both the layers (5) and (6) belonged to the Scytho-Parthian period. The last layer dipped down towards a stone diaper wall. To this period also belonged a brick well. Below this stratum there were a series of ashy streaks marked on alluvial clay. In layer (7) was found a coin of Antialkidas. These ashy streaks covered a large well, measuring 6'-3'' in diameter. Below the ashy streak several deposits of clay yielded pot-sherds and terracotta figurines. The water level was found at forty two feet below the datum line.

7. COINS (pl. LI)

As many as 475 coins¹ were discovered in the excavation, of which one was of gold, four of silver and the remainder of copper. The coins were much corroded. After cleaning, we could clearly identify 291 coins. They are shown in the chart published here. The deciphered coins are distributed as follows:-

Greek=16.

Agathocles 1. Menander 2. Apollodotus 5. Antialkidas 2. Heliocles 1. Lysias 1. Telephos 1. Philoxenus 3.

Scytho-Parthian 54.

Maues 5. Azes 45. Azilises 3. Gondophares 1.

Kushana 219.

Kujula Kadphises 5. Wima Kadphises 60. Soter Megas 38. Kanishka 77. Huvishka 31. Vasudeva 8.

1. It is regretted that owing to shortage of funds complete catalogue of the coins could not be published in this issue. In some future date the catalogue will be published. The catalogue has already been prepared by Mr. Muhammad Kamal, Curator of the museum.

Punch-marked 2.

The largest number of coins have been found in the upper strata simply because larger area of the Kushana period was uncovered. Greek coins are very few in number as the area in the lower levels was limited. Of the Scytho-Parthian rulers the coins of Azes are the largest. It is not possible to distinguish Azes I from Azes II in this series of coins. But if the evidence of number could be relied upon, it may be suggested that during the days of Azes the city had a flourishing period. We describe below a few coins:-

1. *Thick copper coin of Agathocles.* Square but one corner clipped. Obv: Indian deity in *Sari*, head blurred. Rev: lion to left in incuse stamp. Legends obliterated. cf. coin no. 45 in *Punjab Museum Catalogue*. The coin is attributed to Agathocles, and not to Pantaleon, on typological grounds. Trench D1, (17), Period VI. (pl. LI, No. 3).

2. *Thin Copper coin of Menander.* Square. obv: Elephant's head with upraised trunk, legends on three sides in Greek — *Basileos Soteris Menandroy*. Rev: Club of Heracles with *Kh.* letter *Sa* in the field legend on three sides in Kharoshthi — *maharajasa tratarasa Minandrasa*. cf. coin no. 512 in *P.M.C.* Trench B5 (13), Period VI, pl. LI, No. 7).

3. *Extremely thick copper coin of Menander.* Square. obv: Helmeted bust of Pallas. Greek legend —Soteris Menandroy. Rev: Horse prancing to right. legend illegible. in the balk of E1 — E2 (2). cf. Narain: *Coin types of the Indo-Greeks*, P. 14 no. 5. Period I, Pl. LI, No. 2.

4. *Copper coin of Apollodotus.* Square but one edge slightly broken. obv: Apollo holding bow with Greek legend on three sides. *Basileos Apo..... Soteris*. Rev: tripod lebes within dotted rectangle. *Kh.* legend *Maharajasa..... Tratarasa*. Trench A1 (17). Period VI, Pl. LI, No. 4. There are three more coins of similar type—one from A9' (6) period IV, another from A9' (4) period III and third, small and thin, from B3 (3) period II.

5. *Copper coin of Apollodotus.* Round. obv: Apollo to right with illegible Greek legend. Rev: tripod lebes. *Kh.* legend *Maharajasa tratarasa Apaladatas*. Trench A9' (6) period IV. Cf. coin no. 322 in *P.M.C.* Pl. LI, No. 6.

6. *Copper coin of Antialkidas.* Square. obv: bust of Zeus to right. Greek legend — *Basileos Nike.....* Rev: Pilei and the Palms of Dioskouroi. *Kh.* legend *Maharajasa.....* cf. coin no. 193 in *P.M.C.* Trench A1 (14) period VA. A similar coin from K9' (7).

7. *Copper coin of Heliocles:* Square. obv: Diademed bust of king to right. Greek legend *Basileos dikaios Heliokleous*. Rev: Elephant to left. *Kh.* legend *Maharajasa dhramikasa Heliakreyasa*. cf. coin no. 148 in *P.M.C.* Trench A8' period V. Pl. LI, No. 5.

8. *Copper coin of Lysias:* Square. obv: Bust of Heracles. Greek legend — *Basile..... Anike.....* Rev: Elephant, illegible *Kh.* legend. cf. coin no. 157 in *P.M.C.* Trench B5 (12). period VB.

CHART No. 2
CHART OF COINS

Periods	Vasudeva	Huvishka	Kanishka	Soter Megas	Wima Kadphises	Kujula Kadphises	Gondo-Phares	Azes	Azilizes	Maues	Telephos	Lysias	Apollodotus	Antioch
I Late Kushana	1, 2, 9, 10, 12, 35, 158, 172.	52	11, 22, 129, 193.		8, 192.									
II	Middle Kushana	17, 23, 24, 26, 27, 28, 29, 31, 51, 105, 107, 112, 152, 183, 197, 223, 234, 242, 252, 285, 299, 379, 392, 445, 402, 317, 386, 433, 340, 467.	3, 4, 5, 18, 19, 25, 30, 32, 34, 46, 56, 57, 58, 59, 62, 63, 83, 84, 85, 86, 87, 102, 104, 109, 114, 117, 120, 122, 123, 130, 140, 144, 165, 167, 175, 178, 182, 184, 187, 190, 191, 202, 203, 206, 232, 235, 237, 250, 271, 282, 284, 286, 287, 288, 295, 300, 301, 311, 314, 329, 345, 364, 365, 367, 368, 374, 376, 385, 394, 397, 403, 437, 456.	6, 50, 60, 66, 76, 93, 108, 128, 131, 153, 204, 238, 243, 246, 247, 248, 265, 275, 280, 313, 308, 355, 359, 361, 447.	15, 20, 37, 41, 43, 47, 55, 65, 67, 68, 69, 70, 73, 75, 90, 97, 99, 143, 207, 208, 221, 224, 225, 241, 260, 291, 292, 297, 298, 302, 305, 307, 315, 333, 400, 418, 420, 421, 425, 428, 439, 461, 463.	134, 318, 435.		7, 141, 150, 173, 240, 274, 293, 349, 371, 372, 404, 411, 414.	161	44, 61.				
III	Early Kushana			77, 78, 88, 92, 103, 137, 138, 149, 166, 209, 269, 370, 419.	81, 82, 89, 139, 146, 163, 171, 179, 189, 343, 356, 390, 391, 395, 331.	347, 409,		176, 188, 200, 336, 345, 351, 398, 405, 406, 422, 423, 426, 427, 438, 440, 441, 443, 417.	157	53			473	

IV (a)

HUGE POTTERY LAYER

IV (b)	Scytho-Parthian						444	210, 211, 212, 213, 214, 215, 216, 217, 218, 335, 431, 432, 442.	413	448, 462			382 446	
V (a)											233			
V (b)													259	
VI														236

9. *Copper coin of Telephos*. Square: obv; Zeus seated in a chair legend illegible. Rev: Standing warrior *Kh.* legend illegible. cf. coin No. 640 *P.M.C.* Trench DI (11) period VA.

10. *Copper coin of Philoxenus*: Square: Obv: Demeter holding cornucopiae. Greek legend: *Basileos Anikitoi Phi.....* Rev: Bull. *Kh.* legend *Maharajasa.....* Trench A8' (7). period V. cf. coin No. 590 in *P.M.C.* Another coin from the same trench.

11. *Copper coin of Philoxenus*: Square: obv: Sun-god facing Greek legend *Basileos Anikitoi.....* Rev: winged Nike *Kh.* legend: *Maharajasa Apadihatasa.....* cf. *B.M.C.* Pl. XIII. 9. Trench A8' (7) period V.

12. *Coins of Azes*: Nine round coins of Azes were found in a pot in trench A5 (6), period IV B. (Pl. LI). Two of them are of silver (Nos. 10 & 14) and the remainder of copper. The silver ones have on one side king on horseback and on the other Zeus Nikephoros. The legends are the same as given in coin no. 56 pl. XI of *P.M.C.* The copper coins have Bull on one side and Lion on the other. cf. coin no. 263 pl. XII in *P.M.C.* Legends are the same.

13. *Gold coin of Wima Kadphises*: (Pl. LI, No. 1) Round. obv: Half length figure of the King to left. Greek legend. *Basileus OOimo Kadphisis*. Rev: Siva and Bull and one attached button hole. *Kh.* legend: *Maharajasa Rajadira-jasa Sarvaloga isvarasa Mahisvarasa Vima Kathphisasa tratarasa*. Trench J8' (3). The coin was found in the middle Kushana period, when it was used as a button.

In view of the present stratigraphy, to which these coins can be definitely related, we can arrive at some conclusions. This, we believe, will go a long way to settle some of the knotty problems in the chronology of these rulers. If this method of excavation is further extended in Shaikhhan Dheri, it is believed that more materials will be available to settle the question of succession of these rulers.

First of all we will take up the question of the Greek rulers. In period VI we found the coins of Agathocles, Menander and Apollodotus (See Fig. 5 for the actual layers). So far we had assumed the nearness in time between the rule of Agathocles and that of Menander on the basis of coin types but the present stratigraphic evidence adds a further corroboration. Regarding Apollodotus there has been, of late, a great divergence of opinion. Apart from the question¹ of the existence of two Apollodoti, Dr. A.K. Narain has challenged the earlier date so far propounded. He writes: "There is hardly any evidence for the existence of an early Apollodotus I as a king of the Indo-Greeks. The testimony of the over-struck piece does not solve the problem, as we shall show in Chapter V, where we also discuss the difficulty of distinguishing two Apollodoti on copper coins"². He further adds:

1. See *Journal of the Numismatic Society of India*, Vol. XIX, Pt. II, 1957, pp. 121 ff, and *ibid*, Vol. XXI, Pt. I, 1959, pp. 20 ff.
2. A. K. Narain - *The Indo-Greeks*, Oxford, 1957, P. 69.

"Apollodotus seems to have begun his career at about the same time as Antialcidas and after the reign of Philoxenus and his contemporary kings, i.e. about 115 B.C.; on the basis of his coinage he may be assigned a reign of at least twenty years, including his career as joint-king thus he ruled until c. 95 B.C., and outlived Antialcidas."¹

This conclusion of Dr. Narain can now hardly be accepted on the basis of the present evidence. Though the coins of Apollodotus survive till the Middle Kushana period, still the pertinent coin is the find in the earliest layer. On the basis of this coin Apollodotus appears to be a near contemporary of Menander and definitely much earlier than Antialcidas. Similarly if the late survival of the coins bearing this name can be suggestive, it is fair to assume the existence of a second Apollodotus in some later date. Only on such an assumption we could possibly understand how one Apollodotus ruled after Philoxenus. The rule of this latter king is definitely fixed by the find of his three coins in the last occupation levels of the Greeks, i.e. period V.A. With him Antialcidas and Telephos were near contemporaries.

Two punch-marked coins of debased silver metal survived in the Greek levels.

There has been a great controversy over the chronology and attribution of the coins of a nameless ruler bearing only the title of Soter Megas. Opinions have varied from an unknown ruler of the Parthian period to some governor of the Kushana dynasty. The present stratigraphic evidence definitely shows that such coins were issued not before Early Kushana period. If they were not the issues of Wima Kadphises himself as a prince, they must have been issued by some one authorised by the early Kushana rulers.

Of the Kushana coins the Siva-and-Bull type was the largest in number. Often it is very difficult to distinguish the coins belonging to Wima Kadphises, Kanishka and Vasudeva, because in these copper coins the legends are hardly legible. But the pose of the left hand has been a great helping factor in the identification of the coins. Those coins, which show the left hand of the king at the waist, usually belong to Wima Kadphises, and those coins which show the left hand upraised holding a spear, belong to either Kanishka or Vasudeva. The coins of Vasudeva are much cruder and easily recognizable. Among the coins of Huvishka there are 19, which are of elephant-rider type (See *P.M.C.* nos. 137, 147 and 151 pls. XVIII and XIX). Among the coins of Kujula Kadphises there are three, which show bust of Hermaios on the obverse and Herakles on the reverse (See *P.M.C.* pl. XVII. No. 1), and there is one showing the seated man on the reverse — the so-called "Buddha" type (*P.M.C.* Pl. XVII, 29).

8. STONE SCULPTURES

In a city site it is not usual to get sculptures unless, of course, we hit upon a religious building. This dictum holds true even in the case of Shaikhhan Dheri, where sculptural pieces were few and far between. It is only from the

1. *Ibid.* P. 126.

House of Naradakha that we obtained a good number of sculptures but almost all of them were broken. Some broken pieces fitted together and we could reconstruct completely some of them by piecing together the fragments, and they now provide us with reliable evidence to have a firm basis for the chronological study of the Gandhara sculptures. As the history of the House of Naradakha is well established by stratigraphic evidence, and we have also been able to get radio carbon date for Kanishka layer, it is now possible to do away with surmises and understand the beginnings of Gandhara art in the time of Kanishka.

Summarising the evidence of Marshall's excavation at Sirkap (Taxila), Van Lohuizen de Leeuw writes "Marshall did not find one Buddha image or even a fragment of one during his excavations at Sirkap, which, according to coins and other things discovered there, appears to have been abandoned only after Kujula Kadphises. Our conclusion therefore must be that the first Buddha images could have been made at the earliest only during Wima Kadphises' reign."¹ This conclusion has to be modified in the light of the present evidence, if the excavations, so far carried out at Shaikhhan Dheri, can be generalised. As the House of Naradakha was in existence at the time of Wima Kadphises, we were very particular to note any sculptural find in this level but to our surprise we got none. The earliest sculptures in our dig belong to the time of Kanishka.

Taking this evidence as the firm basis, we have now to start afresh our approach to the study of the Gandhara sculptures. To quote again Van Lohuizen de Leeuw, "When dating the art of Gandhara most writers started either from Style-critical remarks, in which case especially the art of Greece and Rome served as "tertium comparationis", or from an aesthetical appreciation of the reliquaries of Kanishka and that of Bimran, while also hypotheses regarding the era in which some images are dated, exercised influence. The first way of arriving at a chronological fixing of the school of North-west India may undoubtedly lead to correct results in some cases, provided it is carefully used but the two other methods must be rejected in advance"². According to the present evidence even the first method recommended by Van Lohuizen de Leeuw can no longer be upheld. The following discussion will show that closer parallels with classical types exist even in later examples. The finest example in our dig is no. 16, a four-armed goddess, in the classical style but found in the last period of Shaikhhan Dheri. This evidence is a great corrective to our approach. The art of one school cannot be studied in terms of another. Any school of art has to be studied in its total circumstance within the area and society where it develops. Its chronology has to be built on its own right. Foreign links can help in building the chronology if the imports or their copies can be proved and definitely dated. By merely saying that the style is classical, we hardly get at the root of the subject. The style of particular sculptures could be classical at any period in the history of Gandhara art depending upon the commercial link and the ability of the artist to reproduce it. The old idea that the school was started by the Greek or Roman artists

1. *The Scythian Period*, Leiden, 1946, P. 99.

2. *Id.*, P. 73

no longer holds true in view of the fact that the Gandhara art was the gift of the Kushana emperors who had built up a far-flung empire and laid the foundation of a peaceful society, in which rich international commerce and trade had provided the necessary encouragement and the neo-Buddhism of Gandhara had added the stimulus and inspiration to the out-burst of this new school of art in Gandhara. In this new atmosphere the Gandhara art has to find its due place and appreciation. The sculptures discovered at Shaikhan Dheri provide the first basis for an humble beginning in this approach.

The sculptures are described below under two groups, A and B, according as they are found in the Middle Kushana period (Group A) and the Late Kushana period (Group B). Those described under miscellaneous finds belong to the Late period, but even this last period is not later than the time of Vasudeva. Therefore all the sculptures found in our dig belong to about one hundred years of the rule from Kanishka to Vasudeva. Even in this short period two sub-styles are quite apparent. As the description will show, the materials also slightly change. In the early period we get grey schist and later we have generally brownish or bluish schist. This difference may be local to Shaikhan Dheri, depending upon the availability of stone. But the change of stone definitely shows different hands in the production of the art. While in the first case the sculptures are much more refined and balanced, and the figures are romantically natural, in the second case they have become stylised and conventional. The facial type has assumed a round fleshy form. The Bodhisattvas are all clad in the Indian style. The presence of the classical type of the goddess here does not make a difference. On the other hand even in the first period Indian influence is deeply marked. The narrative manner of depicting the life of the Buddha in the cruciform casket (no. 3) as well as the pointed arch at once suggest the Ajanta facade and the Sanchi relief works. Much more than this is the *Kapardin* type of Buddha in red sandstone (no. 4). This is, no doubt, an import from Mathura into Shaikhan Dheri, but we find even at this date the two styles of Mathura and Gandhara fully developed. The Gandhara figures of Hariti (no. 1) and Buddha (no. 2) show no influence from Mathura school of art, nor can any one take them to be classical in style. The forms and the whole manner are typical of Gandhara, and they reached this high water-mark even in the time of Kanishka. Whatever art traditions were available to the Kushana rulers in their empire, were pooled together to recreate a new school in Gandhara, to which several influences were added from time to time.

It must, however, be remembered that the Buddha type of Gandhara does not owe its origin to Mathura nor the Mathura type is borrowed from that of Gandhara. The two types, which are based on the Buddhist concept of a monk, originate probably simultaneously in the two schools on the art traditions of the two regions. And here in the time of Kanishka in the House of Naradakha we find both of them buried together in the debris to provide a solid evidence of their co-existence.

It may also be pointed out that the parallel lines in the folds of the drapery does not necessarily point to a later date. Here the figure of the devotee

(no. 21) has parallel lines in his garment but it belongs to the time of Vasudeva. Such figures are grouped in the last category by Ingholt. He says: "The fourth group is perhaps the easiest to recognize, as its *Leitmotif* is simply the use of paired, parallel lines to indicate the folds of the drapery".¹ And again he adds: "We find them on the Sassanian silver bowls, but for only a relatively short time, namely, in the reign of Shahpur II (209-79) and Shahpur III (283-88). We might thus date the occurrence of these paired lines in Iran in the second half of the fourth century, which would give as a reasonable date for their appearance in Gandhara the first half of the fifth century".² This conclusion can hardly be maintained now. We find the paired folds even in the time of Vasudeva. This evidence again points to the fact that the chronology of Gandhara art cannot be built on the basis of foreign art evolution. The subject has to be studied in its own right. The following materials may provide a basis for making a new study.

GROUP-A

1. Hariti seated on a high backed chair with her feet resting on a stool. A child seated on either side of the stool, the left child holding some eatable in the right hand. Behind them two standing children, one on either side, reaching just beyond the knee of Hariti, both raising their one hand and touching the baby in the lap of Hariti, the baby holding the mother's garland. Two more children are seated high above on the back of the chair (one child's head broken). The children are all naked but have bangles, armlets, anklets and necklace. Tuft of their hair is tied with a ribbon over head and others combed behind except that of the standing children. Hariti herself is in a frontal pose boldly jutting out from the back of the stela, with which is integrated the chair, plain halo behind her head. The figure is draped, with the folds of the drapery lightly shown, her breasts prominent behind the bodice, her left hand supporting the head of the baby and right hand raised up with palm to the front and holding a bunch of grapes with two fingers. She is richly ornamented, the forehead ornament very distinctive, still worn by the modern Pathan women, the hair combed and tied in plaits with bejewelled ribbon over head. Face fleshy and straight, eyes three-fourth open and lips in a pose of satisfaction. Size 11"x7 $\frac{1}{2}$ ". Material grey schist. No. 2211. trench B4 (2) pl. XVI.

2. Seated Buddha in *Abhaya* pose, the seat legged, only two front legs shown, the space between them relieved showing folds of a sheet cover. The upper garment, covering both the shoulders, falls in folds in the lap between two hands and goes down to the upper frame of the seat. The garment, which comes from behind, also covers the hands, one of which holding its hem, and its forefinger pointing to the earth. Face is fleshy and straight, eyes three-fourth open, lips closed with satisfaction, nose straight, ear-lobes lengthened, auspicious mark on the forehead, the hair combed behind and tied in a top-knot, behind the head a simple halo with an incised line at the margin, the fingers in the right hand webbed. The whole is a graceful presentation of an

1. *Gandharan Art in Pakistan*, New York, 1957, PP. 37-38.

2. *Ibid.*, P. 39

idealised Buddha in the high relief technique, the back being entirely flat. Size 10''x6 $\frac{1}{2}$ '''. Material-grey schist nos. 2330 and 1861 trench B4 (2) pl. XVII.

3. Upper part of a cruciform relic casket pl. XVIII, No. 3 but the dome missing, having copper revets of later repair. Probably a metal dome was fitted into the socket of the top opening. The lower portion is broken. The four arms are relieved with fish-scales, representing tiles. Each one of them has two holes and the ends show pointed arches above side copings. Underneath the arches are dentils—a design in obvious imitation of the Ajanta cave facade. The space within the arch has scenes in two rows, depicting early life of Buddha. Two of the faces are broken. pl. XVIII, No. 4 upper scene depicts the astrologer Asita, in his typical Brahmanic dress, foretelling the future of the Buddha to the king seated under a royal umbrella with the queen behind. In the lower register the scene depicts the seven steps taken by the child Buddha with four devotees in folded hands and at the sides we have an elephant rider. The second face pl. XVIII, No. 5 shows, in the upper register, Buddha as a student, under a royal umbrella, going to school in a ram-driven chariot, while, in the lower register, we have the offering of food to the seated Buddha. Again at the sides we have an elephant with an upraised trunk. The third face, partly broken, (not illustrated) shows Buddha as a prince being taken out in a chariot for a round in the city. no. 1758. trench B4 (2). Size 7''x7'' Height 3''. Material grey schist.

4. Kapardin type¹ of Buddha(lower part broken), only head and right hand preserved. The head shows a round fleshy face with half-subdued smiling lips, eyes half open, auspicious mark at the forehead, *Ushnisha* over-head, the right hand upraised in the *Abhaya* pose, the palm having the auspicious symbol of *chakra*. The stela behind is semi-circular with half circle incisions within two incised circles and lotus petals outside and astride are two *gandharvas* in folded hands and typical Indian dress with one leg raised up. At the back side are engraved three umbrellas over a relic chamber, obviously on the top of a stupa, now broken. Streamers slope down the umbrellas. Four serpents raise their hoods on the right of the relic chamber, the left side being lost. Size 5 $\frac{1}{2}$ ''x4 $\frac{1}{2}$ '''. Material red sandstone. no. 1470 trench B4 (2). Pl. XVIII, Nos. 1 and 2.

5. Rectangular pedestal of a relic casket with nine steps on one side. By the side of the steps are two pillars, one on either side, with a figure of atlantis carved in front. The pedestal has four rectangular holes at the corners obviously for pillars to support a canopy, and a circular socket in the middle for holding the relic casket (not found). At the back there is a Kharoshthi inscription (see Section 10) in the Kushana cursive style recording the name of the Buddhist monk Naradakha, whose ashes were deposited here. Size 8''x5 $\frac{1}{2}$ ''', the step projection being 2 $\frac{1}{4}$ ''', height 1.2''. Material: grey schist. no. 1749 trench B4 (2) pl. XXII, Nos. 1 and 2

6. Hollow drum of a model stupa with a hole for the umbrella shaft, and turned projection for fitting into the socket of the base. The drum is decorated with three raised lines at the base, a raised moulding at a height of 1''

1. See Von Lohuizen de Leeuw - *The Scythian Period*, Leiden, 1949, P. 163.

from the bottom and a decorative frieze of triangles in the middle. Height 3.5" and diameter 4". no. 1750 trench B4 (2). Material — greenish schist. (Fig. 9, No. 6)

7. Same as no. 6 but smaller in size and has no hole for the umbrella shaft. Height 2.7" and diameter 3". no. 1751 trench B4 (2). Material — greenish schist. (Fig. 9, No. 7)

8. Same as no. 6 but taller and has no decorative frieze in the middle. Instead, between the moulding and the lines there is a frieze of patterns made by intersecting arches. Height 4.6" and diameter 3.7" no. 2228 trench B4 (2), Material — grey schist. (Fig. 9, No. 10)

9. Model of a stupa in two separate parts, base and drum. The base is a square, 8" each side, with corinthian pillars at the corners and one in the middle of each side separating a five-petal lotus flower. The cornice consists of eight brackets. The top of the base is flat in imitation of the circumambulation passage. In its middle there is a hollow for the socket and a deep cavity for the relic. The drum has three raised mouldings, the upper two giving wider space, obviously suggesting two more circumambulatory passages. In between the lower two mouldings there is a continuous line of leaves sprouting from a tendril. Between the upper two mouldings there is a spiral decoration with acanthus leaves within volutes. Above the final moulding there is a row of pillars supporting the main solid drum. Its upper part is covered by large lotus leaves. On the top of the drum is a square *harmika*, which has a hole in the middle for supporting an umbrella, three of its pieces found later (no. 2223). On the whole the stupa model is lavishly decorated. But strangely enough no figure of Buddha appears on it. Total height upto the *harmika* 12". Material brownish schist. no. 1759, trench B4 (2). Pl. XIX, No. 1.

10. Round base of a relic casket with a deep hollow in the middle for the relic; diameter 5", height 1.7" material — brownish schist. no. 1754, trench B4 (2).

GROUP-B

11. Head of a Buddha, lower part broken, having a roundish smooth face, mouth and nose partly damaged, eyes half closed, auspicious mark on the forehead, ears distended, hair combed behind with the *ushnisha* overhead. There is a complacent charm all over the face which derives its form from an idealised concept of a well-bred youth. This is the arch-type of the Gandhara face, far removed from the classical mode of depiction. Height 8", width 5½". Material brownish schist. No. 2400 trench C4 (2). Pl. XX, No. 1.

12. Seated Buddha in *Abhaya* pose, in the same style as no. 2 above. The front of the seat is, however, carved with spiral design. In the same style both the shoulders are covered, and the folds fall between two hands, the left hand holding the hem of the garment, but in this case the forefinger is not pointing down. The folds of the garment are also traced on the back. The raised

right hand has a rather flattish palm. Above the thigh of the right leg the sole and the fingers of the left foot can be seen. The face is sliced off by a natural cleavage, the ears distended. The halo is plain with only a simple incised line at the margin. The production of the form has a close technical resemblance with no. 11 above. Height 10'', width 6.8'', material brownish schist. no. 2505 trench C4 (2). Pl. XX, No. 2.

13. Standing figure of the Bodhisattva Maitreya projecting from a tall rectangular stela. The figure, which is bare-footed, fingers of the feet clearly shown, is standing on a pedestal, the front of which is carved with three four-petalled flowers. The *Bodhisattva* is poised on the right leg, the left knee slightly bent, holds a *kamandalu* in the left hand, which is hung down. The right hand, which was probably in the *Abhaya* pose, is broken. The abdomen has a slight bulb just below the navel and the chest is brought forward, the shoulders are broad on which falls the hair. The ear ornament is preserved only on the left side. The face is sliced off. The *ushnisha* protrudes above the combed hair. The halo is simple with only incised line at the margin. The lower garment falls down in folds to the ankles and the upper *shawl* covers only left side but goes behind the body. Three strings of necklace, a long amulet string and a bangle are additional ornaments. Technical production is similar to no. 12 above. Height 12'', width 5''. material brownish schist. no. 1455 trench B4 (1) above the charcoal layer. Pl. XXI, No. 3

14. Badly damaged figure of Buddha standing on a pedestal, 2.5'' high. The pedestal, which has its front corners chamfered, is decorated with incised borders forming a rectangle, which is further compartmented into triangles, each having a wedge mark. The Buddha, whose head and right hand are broken off, stands bare-footed on the pedestal, poised on the right leg, the left knee bent, the lower garment falls straight down and the upper shawl covers both the shoulders. The left hand, hanging down, holds the hem of the garment. Technical production is similar to no. 12 above. Height above the pedestal 10'', width 4.8''. material bluish schist. no. 2438 trench C4 (2) pl. XX, No. 4.

15. *Bodhisattva* Maitreya standing on a pedestal, 1.8'' high. The back stela, halo and the arms are broken. The pedestal is decorated on three sides with a row of squares with intersecting diagonals and wedge marks inside. The *Bodhisattva* is wearing a *chapal* on the feet, is clad with garments, upper and lower, the right shoulder being bare, has a torque round the neck, a round amulet on the chest, arm-let, ear-rings, and the tuft of hair bifurcated in the middle by a tie. It is poised on the right leg, the left knee slightly bent. The face is fleshy, rather longer but the forehead and the eyes are damaged. Technically it is related to no. 14. Height from the pedestal 10.4'', width 5.6'' material bluish schist, much worn and the flakes are coming out. no. 2835. trench C4 (2). Pl. XIX, No. 2.

16. Four-armed goddess (*Durga*) standing to front, boldly projecting from the back stela, and poised on the left leg, the right knee being bent. Two hands are raised up and two are hanging down, the right one holding a

Kamandalu. The breasts are prominently marked, in between which hangs a garland. The face has a classical touch in its romantic expression and the head gear is tall over a curly hair, probably a wreath round the hair. She is putting on an Indian *sari*, tied with a girdle, its ends falling in front, the sari being shown by scratches. The upper part is covered by a close-fitting dress. The face is very expressive and the whole body shows a movement, tuned by the pose of the right leg. Height 5'', width 2'', material bluish schist, but poor in quality. No. 2599 Trench C4 (2) Pl. XXI, No. 2.

17. An unfinished Buddha seated in the *Dhyani* pose on a seat, not well defined. The bluish schist, of which it is made, is decayed. Height 4½'' width 2''. no. 1609 trench B4 (1).

MISCELLANEOUS

18. Lower part of two figures carved on a stone. The figures, whose upper part is broken, are putting on a tight fitting long dress of the Kushana type falling upto the knees and having pointed corner ends, the folds being shown by vertical incised lines. Height 5.6'', width 11''. material schist. (pl. XIX, No. 3) no. 691 trench F0 (2).

19. Broken part of a sculpture showing a person (head broken), having beaded necklace, seated on a high seat with his draped legs resting down on the ground, his two hands are placed in front, material grey schist, but poor in quality. Height 5'' width 3'' no. 1394, trench E0 (3).

20. Torso of standing Buddha with the right hand in the *Abhaya* pose, the left hand hanging down, holding the garment, which covers only the left shoulder. Height 4'' width 2.2'' no. 1799. trench B0 (2) material bluish schist (pl. XX, No. 3)

21. A headless torso of a devotee with folded hands, turned to left, draped in upper and lower garments, the upper garment is covering only the left shoulder. The garments have parallel lines of fold. The fingers are clasped, and the figure is poised on the right leg, the left being bent. Height 5'', width 2.2'' material brownish schist. no. 2900 trench A2' (1) (pl. XXI, No. 1 left one).

22. Another torso of a devotee but turned to right. The hands are folded. The upper garment covers only the left shoulder. The back of the bluish schist stone is sliced off. material bluish schist. Height 7.6'' width 2.3'' no. 3356, trench J9' (2) (Pl. XXI, No. 1, right one).

23. Stucco figure of a seated Buddha, lower part only, from waist down, hands in the *dhyani* pose. The drapery, which is squarely cut and is conventionalised, falls on the pedestal. no. 2711 trench C4 (1).

24. Many fragments of stucco relief, including a face, much damaged, turning to left, and a part of a small seated figure, no. 2467. trench C4 (1).

25. Stucco fragments of draped Buddha seated in the *Abhaya* pose, with

prominent *Ushnisha* on the head. Height 6'' width 4''. It is accompanied by another seated figure of similar size. no. 2701. trench C4 (1).

There are many other broken fragments which are not catalogued here.

9. TERRACOTTA FIGURINES

Part-I

H U M A N

Human terracottas from Gandhara have long been studied. Dr. A. K. Coomarswamy¹ was the first to describe and assign one type² of them to the second millennium B.C. This date was later supported by Mlle. Simone Corbiau³ who conducted hurried excavation at Sar Dheri. Such an early date was challenged by Professor K. de B. Codrington⁴ but it was left to Col. D. H. Gordon⁵ to make a thorough survey of the whole material. Some Indian scholars voiced⁶ the opinion expressed by Coomarswamy.

With the publication of Sir John Marshall's *Taxila* and Sir Mortimer Wheeler's *Charsada* the study of the human terracottas from Gandhara has assumed a definite shape. Sir John makes a very pertinent comment. "Most of them (terracottas) come from the Bhir Mound and Sirkap cities, but it is a curious fact that none were found in the lowest (fourth) stratum of the Bhir Mound, and of the very few from the third stratum some are undoubtedly strays from the second, and the rest cannot be dated much earlier than the close of the fourth⁷ century B.C."⁸. This observation is again supported by Sir Mortimer's excavation at Charsada (Bala Hisar) where the earliest terracottas were of "Baroque Ladies" type but found only from layer twenty two upward. The layers below, i.e. from twenty two to fifty did not produce any example. Hence he concludes "On my dating, this implies that they came in sometime during the third century B.C. and lasted until the latter part of the 2nd century B.C. Of this century they were pre-eminently characteristic, though it may be suspected that Indo-Greek modes began to supersede them after the Bactrian conquest of the Frontier and the Punjab (by Demetrius 11)".⁹

1. His first article appeared in (i) *Boston Museum of Fine Arts, Bulletin*, Dec: 1927, and later a comprehensive article on (ii) Archaic Indian Terracottas in *I P E K*, 1928 Leipzig, pp. 65 ff.
2. Type 1 "Baroque ladies", see below.
3. Her publications are (i) 'Collection de pieces provenant de l' Inde' in *Bulletin des Musees Royaux d' Art et d' Histoire*, 1936, Brussels. (ii) 'New finds in the Indus Valley' in *Iraq* Vol: IV, Pt, 1, 1937, London. (iii) 'Pre-historic Remains on Historic Sites of India' in *Man*, 1937, London.
4. 'Some Indian Terracotta Figurines' in *Indian Antiquary*, August, 1931.
5. His contributions are (i) 'Terracottas from Sari Dheri, North West Frontier Province' in *Journal of the Royal Anthropological Institute*, Vol: LXII (1932); (ii) The Mother - goddess of Gandhara in *Antiquity*, Vol: XI (1937); (iii) 'The Age of Frontier Terracotta *Iraq*, Vol: V (1938); (iv) 'Early Indian Terracottas in *Journal of the Indian Society of Oriental Art*, 1939, Calcutta.
6. CC. Dasgupta 'The problem of Ancient Indian Terracottas' in *Indian Historical Quarterly*, March 1936, Calcutta. See also his 'Bibliography of Ancient Indian Terracotta Figurines' in *Journal of the Royal Asiatic Society of Bengal* Vol. IV. No 1, 1938. Calcutta. V. S. Agrawala - 'Mathura Terracottas' in *Journal of the U. P. Historical Society*, July 1936.
7. This date is according to Marshall's chronology.
8. *Taxila*, Vol: II, P. 440
9. *Charsada*, P. 106.

These two excavation reports clearly stress the gap between the terracottas of the *Indus Civilization* and those of the historic period now under discussion. That period remains to be bridged in future¹. It may be pertinently remarked here that the applique' technique known in the case of the "baroque ladies" appears to be an old heritage from the time of the *Indus Civilization*. The new materials on the Gandhara terracottas more or less confirm the dating suggested by Codrington and Gordon. However, the evolution of this terracotta art by the introduction of new techniques still remained undefined. The use of the vague term "Hellenistic" complicated the whole problem. While Sir John was inclined to trace its influence from the "Mauryan" period, Sir Mortimer limited the lower horizon to the time of the "Indo-Greek" conquest, as is, implied in the above quotation. All other writers have tacitly assumed the great influencing factor of these Greeks without paying any heed to the fact that these Greeks came from Bactria, and not from their original home in Greece. It is probably for this reason that we have so far not been able to identify any Bactrian Greek specimen of art. The present excavation at Shaikhhan Dheri is a great corrective, and though future work may add more materials, the available evidence is highly suggestive.

In the Bactrian Greek period (V and VI) the dominant type of the terracotta is the "Baroque ladies". This type continues right upto the end of the Kushana period (i.e. Vasudeva's reign), though it is clear that the Kushana examples are only late survivals. The other three types known from periods V and VI are "Double-moulded solid figurines (type III), 'Hand-made flat female figurines' (type VIII) and "Hand-made Toys" (type IX).

The so-called "Hellenistic" types include type III (above), type IV ("Double-moulded Hollow figurines"), type V ("Single-moulded figurines"), and type VII ("Emblemata" figurines). In the present excavation, except for type III, they dominantly characterise the Scytho-Parthian (period IV) and subsequent levels (III, II and I). As the Taxila evidence is rather dubious from the point of view of dating, can we not take the present evidence as an answer to this question? If this is accepted, then the so-called "Hellenistic" types in Gandhara may be ascribed to the Phil-Hellene Parthians, who were in touch with the Western World. Gordon (see his article IV PP. 161-63) ascribes a similar date (50 B.C. to 50 A.D.) to them.

It is only in the Middle Kushana period (II) that we find the final evolution of the real Gandhara head (type VI).

This new chronology and the evolution of types are presented here on the basis of the available evidence in order to clear the confusion now prevailing about the terracottas. The future material may add new types and varieties and enlarge our scope of study. Meanwhile the different types are described below strictly from the point of view of technical evolution, and they are illustrated from the materials of the present excavation. They are described under the following types. Catalogue numbers are given in brackets for future reference and layers are marked within brackets.

1. We have now discovered terracottas from our excavation of the graves in Dir State, which will fill the gap. The report will be published in the next issue.

Type-I — “Baroque Ladies”

This name is due to Sir Mortimer (See *Op. cit.* pp. 104-9) and is based on their chief characteristic of “baroque” head-dress. Previously the type was described as “the figurines of archaic style” — a term which was based on the idea of archaism, which Gordon took great pains in clarifying (see his article IV, PP. 144-46). Gordon (*Ibid*) also named it as “Sar Dheri” type. Sir Mortimer classified them under two main types - his type (i) includes full-figures, and his type (ii) has “Half-figures”. But, as is shown below, the “Half-figures” are not meant to be half as is supposed by Sir Mortimer. His classification needs to be modified now.

Sir Mortimer has enumerated sixteen characteristics of these figurines. They need not be repeated here. Technically they are characterised by three main features: (i) nose is pinched, (ii) mouth, eyes, breasts and ornaments are applied, and (iii) breasts are punctured while the eyes, waistband, anklets etc. are shown by incised line. Three different methods are used in their manufacture. In the 1st group fall those examples which are made in three parts — head, body and legs separately and then joined together, the joint being emphasized by neckband or waistband. In the second group (see Nos. 42-46) fall those examples which are made differently in two or three parts — the whole figurine including the head in two parts, right half and left half, and then joined together, but sometimes the head is made separate and added later. Both these groups are described here under type I. In the third group is included a figurine in which the head is prepared separately in a mould and then joined to the body. This group is described under type II.

Sir Mortimer also included our type VIII (see his plate XXI, 6) in this category but I have kept it under a distinct type because of different head-dress and splayed legs, though technically they fall under this category. However, it is possible to have further varieties in this type on the basis of the shape of the lower part; e.g. Sir Mortimer’s pl. XXIII. 13 makes a new variety. Similarly Sir John’s pl. 132. Nos. 1, 2 and 3 speak of three distinct varieties. Similar distinctions can be made on the basis of head-dress. But no such sub-classification is made here. Gordon introduced terms like “Sar Dheri” type, “Sahri Bahlol” tupe, “Akhtar Dheri” type, for these varieties. But these terms are discarded because the “types” are not limited to one Dheri. They are common in the whole of Gandhara.

The figurines are described below as they fall in different periods:-

Periods V and VI.

1. (T.C. 504. Gen. Reg. 2721), Trench D1 (17):-

Upper part including breasts and extended arms. Two neck-bands, roundels at the ear, triangular head-dress with bosses (in place of rosettes) at the corners. Plate XXV No. 1.

2. (T.C. 474. Gen. Reg. 2543). trench A1 (17):-

Lower half including one breast. Pudenda, waist-band, anklets (only front) and dividing line, front and back, shown by incised line.

3. (T.C. 602. Gen. Reg. 2707), Trench D1 (16):-
Lower half below navel. Pudenda, waist-band, anklets and dividing line, front and back, shown by incised line.
4. (T.C. 473. Gen. Reg. 2542), Trench A1 (17):
Lower half but broken below ankles. Pudenda, waist-band and dividing line shown by incised line.
5. (T.C. 618. Gen. Reg. 4119), Trench A9' (10):-
Upper part above the navel. Heavily ornamented, with three neckbands — the lowest one having a pendant between the prominently applied breasts, the top most having a tie, the hair is combed behind in a single wide plait, the end being left loose. In the middle of the upper part of the plait there is an embossed ornament. Over the head a tricorn is seen but unfortunately the middle horn is broken. Around the head-dress and over the fore-head are tied two fillets with a further forehead ornament and roundels at the ears. The nose is beautifully formed, the nostrils and breasts being pierced. It comes from the lowest occupation level. Plate XXV, No. 3.
6. (T.C. 654. Gen. Reg. 4334), Trench A10' (10):-
Head with triangular hair-dress having three bosses, instead of rosettes, at the three corners, the top boss being broken. A bunch of hair lock falling at each of the ears simulating ear pendant. Plate XXV, No. 4.
7. (T.C. 624. Gen. Reg. 4133), Trench K9' (8):-
Upper part with left arm and right ear-ornament broken, roundel at the left ear, hair combed behind and tied at the end. No head-ornament but two neckbands, the upper one having a tie knot in the middle and the lower one having (golden) disc beads, seven visible, hanging down. Nostrils are pierced. Plate XXV, No. 5 and 5a.
8. (T.C. 652 Gen. Reg. 4332), Trench K9' (8):-
Almost a full figurine above the knees but right arm and left side of the head ornament broken, has a single neckband with a pendant falling between the breasts. The hair brought in two locks over the ears and supported by triangular head-dress. Pudenda, waist-band and dividing line, front and back, incised. Plate XXV, No. 6.
9. (T.C. 631. Gen. Reg. 4231), Trench K9' (8):-
Head with the left shoulder broken. Roundel at the left ear preserved, two neckbands, lower one broken. Hair combed behind and brought forward in two locks over the ears.
10. (T.C. 653. Gen. Reg. 4333), Trench K9' (8):-
A small figurine with left arm, right eye and part of head ornament broken. Two neck-bands, double embossed roundels at the ears, triangular head-dress having embossed rosettes at the corners, the upper one broken. The hair combed behind and double folded and

further tied at the back of the head with a round clip. Plate XXV, No. 8 and 8a.

11. (T.C. 644. Gen. Reg. 4287), Trench K9' (8):-
Upper part with two neck bands, lower one having a pendant between the breasts. Simple head without ornament. Nose broken. Plate XXV, No. 2.
12. (T.C. 655 Gen. Reg. 4296), Trench K9' (8):-
Upper part with a single neck-band, having a pendant without other ornaments. Plate XXV, No. 7.
13. (T.C. 637. Gen. Reg. 4267), Trench K9' (8):-
Upper part with hair combed behind and falling in two braids. The applied neck-band, breasts and the left arm broken. No other ornament.
14. (T.C. 639. Gen. Reg. 4270), Trench K9' (8):-
Upper part, right arm and applied breasts missing, a single neckband and ear ring, the hair twisted and tied over the head at the top left. Plate XXV, No. 9.
15. (T.C. 643. Gen. Reg. 4285), Trench A10' (8):-
Upper part with right breast and right arm missing. A line is incised between the breasts, two neck-bands and simple head without ornament. Nose broken.
16. (T.C. 640. Gen. Reg. 4274), Trench A8' (7):-
Upper part above the breasts with two neck-bands, roundels at the ear, forehead fillet, triangular head dress with rosettes at the two lower corners, the right one broken. Over the head three incised bosses. The applied eye balls gone but the black line across them visible. Plate XXV, No. 11.
17. (T.C. 610. Gen. Reg. 4105), Trench K9' (7):-
A complete figure with only head dress broken, has roundels at the ears, two neck-bands with long pendants falling through the punctured breasts. Pudenda, waist band, anklets and dividing line shown by incision. An exceptionally tall figure. Plate XXIV, Nos. 1 and 2.
18. (T.C. 608. Gen. Reg. 4102), Trench K9' (7):-
Complete figure above the knees, has a single neck-band with a pendant between the breasts, roundels at the ear over which hangs hair locks, triangular head dress, rosettes missing. Waist band and dividing line shown by incision. Plate XXVI, No. 1.
19. (T.C. 600 Gcn. Reg. 4082), Trench K9' (7):-
Upper part above the breasts with double neck-band, roundels at the ears, triangular head dress, hanging rosettes at the corners, the top rosette broken, four incised bosses over the head, one of them broken. Plate XXVI, No. 4.

20. (T.C. 607. Gen. Reg. 4101), Trench K9' (7):-
Head including a neck-band and pierced ears, hair twisted and tied over head. Plate XXVI, No. 5.
21. (T.C. 628 Gen. Reg. 4172), Trench K9' (7):-
Head with left ear showing two pierced holes, hair twisted and tied over head in three coils. Plate XXVI, No. 10.
22. (T.C. 645. Gen. Reg. 4327), Trench A10' (10):-
Lower part rather rounded than flat, having incised girdle, incised cross-band (*chhannavira*). Pudenda, anklets and dividing line shown by incision. Plate XXVII, No. 7. Compare No. 76.
23. (T.C. 606 Gen. Reg. 4100), Trench A9' (10):-
Lower part, ankles broken, pudenda waist-band and dividing line, only front, shown by incision.
24. (T.C. 627. Gen. Reg. 4169), Trench A11' (9):-
Figurine preserved from neck to ankles, arms broken, has a single neck-band with incised lines between the breasts, waist-band, dividing line, back and front, shown by incision.
25. (T.C. 657 Gen. Reg. 4363), Trench A12' (8):-
A complete figurine upto the neck, left arm broken, has two neck-bands, lower one having a pendant between breasts, pudenda, waist band, anklets and dividing line, front and back, shown by incision. Plate XXVI, No. 6
26. (T.C. 658 Gen. Reg. 4346), Trench A12' (8):-
Figurine preserved between ankles and navel. Waist-band and dividing line, front and back, shown by incision.
27. (T.C. 636 Gen. Reg. 4261), Trench K9' (8):-
Figurine preserved between the ankles and the navel. Pudenda, waist-band, a single anklet and dividing line, front and back, shown by incision.
28. (T.C. 632 Gen. Reg. 4254), Trench A10' (8):-
Figurine preserved between ankles and the neck, has a pendant between the breasts, pudenda waist-band, a single anklet, dividing line, front and back, shown by incision.
29. (T.C. 635 Gen. Reg. 4258), Trench K9' (8):-
Figurine preserved from knee to neck, left arm broken, traces of a single neck-band with an incised line between the breasts, waist-band, dividing line front and back shown by incision.
30. (T.C. 634 Gen. Reg. 4239), Trench K9' (8):-
Figurine preserved from knee to neck, arms slightly broken, has a

single neck-band with a pendant; pudenda, waist-band and dividing line, front and back, shown by incision.

31. (T.C. 642. Gen. Reg. 4279), Trench A10' (8):-
A figurine preserved from navel to ankles, has cross bands shown by black paint and pudenda, waist-band, a single anklet and dividing line, front and back, shown by incision.
32. (T.C. 622 Gen. Reg. 4130), Trench K9' (7):-
Lower part upto the breasts, waist band, anklets and dividing line, front and back, shown by incision.
33. (T.C. 613 Gen. Reg. 4114), Trench K9' (7):-
Lower part, ankles broken, has a pendant on the breast; pudenda, waist-band, dividing line, only front, shown by incision.
34. (T.C. 623 Gen. Reg. 4131), Trench K9' (7):-
Lower part, waist-band, dividing line, front and back, and anklets shown by incision.
35. (T.C. 614 Gen. Reg. 4115), Trench K9' (7):-
Lower part including the breasts, has double incised lines between them, waist-band, anklets, dividing line, front and back, shown by incision, feet missing.
36. (T.C. 611. Gen. Reg. 4107), Trench K9' (7):-
Lower part upto the neck, arms and feet broken, has a single neck-band, pendant incised between breasts, pudenda, waist band, and dividing line, front and back, shown by incision.
37. (T.C. 612 Gen. Reg. 4108), Trench K9' (7):-
Figurine preserved between breast and ankles left side broken, waist band and dividing line, only front, shown by incision.
38. (T.C. 609 Gen. Reg. 4103), Trench K9' (7):-
Torso with arms broken, has a single neck-band with a pendant, waist-band, dividing line, front and back, shown by incision.
39. (T.C. 617. Gen. Reg. 4118), Trench K9' (7):-
Lower part including breasts but one breast missing; pudenda, waist-band, and anklets shown by incision. Plate XXVI, No. 7
40. (T.C. 601. Gen. Reg. 4085), Trench K9' (7):-
Torso with arms broken, has a neck-band with a pendant, and applied hip girdle, dividing line, front and back, shown by incision. Plate XXVI, No. 8
41. (T.C. 626. Gen. Reg. 4151), Trench A10' (7):-
Torso with left arm broken, has a neck-band with a pendant, cross-band (*Chhannavira*) painted in black, girdle shown by black paint as

well as incised line; pudenda, three anklets, and dividing line, front and back, shown by incision. Plate XXVII, No. 2

42. T.C. 620. Gen. Reg. 4120), Trench A9' (10):-

Only left half of the body above waist, arms and head missing, has a breast, double neck-band, conical ear pendant, and hair combed behind and tied in double locks with two extra rounded clips. Technically it was made differently — left half and right half in two parts and then joined together, but in this case right half is missing. Same as Sir Mortimer's type (II) (See his plate XXV. 6-10). Plate XXVI, No. 9.

43. T.C. 615 Gen. Reg. 4116), Trench I 9' (7):-

Only right half of the torso, including one breast and part of a pendant and cross-band (*Chhannavira*) shown by little circlets; hip girdle applied separately, again incised with circlets; pudenda and dividing line marked. Technically it is also made in two halves, the left half missing. Plate XXVI, No. 12.

44. (T.C. 633 Gen. Reg. 4257), Trench A10' (8):-

Lower part, made in two halves but both parts found. Waist-band, dividing line, and anklets shown by incision. Plate XXVII, No. 3.

45. (T.C. 602. Gen. Reg. 4086), Trench K9' (7):-

Lower part made in two halves, but both parts found and joined together. Waist-band and dividing line shown by incision. Plate XXVII, No. 4.

46. (T.C. 656. Gen. Reg. 4340), Trench K9' (8):-

Lower part, made in two halves and joined later. Pudenda, waist-band, dividing line, front and back, shown by incision.

PERIODS IVA AND IVB

47. (T.C. 317. Gen. Reg. 1741), Trench A1 (7):-

Head. A very poor specimen. One neck-band, forehead ornament, hair-plait arranged in front falling over the neck. Behind, long black painted lines representing two braids Plate XXVI, No. 2.

48. (T.C. 289. Gen. Reg. 1580), Trench A1 (6):-

Lower half including extended arms and breasts. Pendant between breasts. Pudenda, anklets, waist-band and dividing line, front and back, shown by incision. Plate XXVII, No. 5.

49. (T.C. 450. Gen. Reg. 2423), Trench B1 (7):-

Right half of the middle part below breasts and above knee but left half not found. Pudenda and waist-band shown by incision. Same as Sir Mortimer's type (ii) See above Nos. 42-46.

50. (T.C. 549. Gen. Reg. 3478), Trench A9' (6):-
Small head, simple, showing only forehead ornament and an incised blob over the left ear. Part below mouth broken.

PERIOD-III

51. (T.C. 588 Gen. Reg. 3967), Trench A8' (4):-
Head with bicorn head-dress tied in a triangular knot having incised bosses at the corners and hair locks over the ear. Neck broken.
52. (T.C. 561. Gen. Reg. 3686), Trench A2' (5):-
Bust. Left arm and right side of the face broken. Has single neck-band, left eyelobe incised right upto the ear, incised ear and hair tied over head as a top knot slightly towards right.
53. (T.C. 536. Gen. Reg. 3283), Trench A4' (5):-
Lower part including the breasts with an incised line between them. Pudenda, waist-band, dividing line, front and back, shown by incision.
54. (T.C. 578. Gen. Reg. 3874), Trench A8' (4):-
Lower part below navel. Waist-band, dividing line, front and back, and anklet shown by incision.
55. (T.C. 598 Gen. Reg. 4060), Trench A8' (4):-
Middle part from the breasts to knee. Waist-band and dividing line shown by incision.

PERIOD-II

56. (T.C. 264. Gen. Reg. 1358), Trench A3 (2):-
Upper part including arms. One neck-band, roundels at the ears partly hidden behind falling hair locks. At the back incised lines representing two braids. Plate XXVI, No. 3.
57. (T.C. 411. Gen. Reg. 2257), Trench B2 (3):-
Simple head-dress made by pinching the clay over head. Ornaments gone.
58. (T.C. 255. Gen. Teg. 1295). Trench A5 (2):-
Upper part but head broken. Two neck-bands, traces of ear-pendants.
59. (T.C. 278. Gen. Reg. 1512), Trench B2 (3):-
Upper part including extended arms. Head and face gone. One neckband, left ear-pendant, and incised line between breasts.
60. (T.C. 250 Gen. Reg. 1271), Trench A5 (2):-
Head with part of neck. Left side head-dress and ornaments gone. Two neck-bands, one ear-pendant, and at the back black painted lines representing two braids.

61. (T.C. 92. Gen. Reg. 263), Trench A0 (1):-
Head showing combed hair placed like a cap to the top right.
62. (T.C. 265. Gen. Reg. 1369), Trench A5 (2):-
Middle part below head and above thigh. One neck-band, a pendant between breasts. Pudenda, waist-band and dividing line shown by incision. Plate XXVII, No. 6.
63. (T.C. 98. Gen. Reg. 281), Trench C0 (3):-
Lower half with a pendant at the breast. Pudenda, anklets, waist-band and dividing line shown by incision.
64. (T.C. 131. Gen. Reg. 462), Trench A0 (1):-
Lower half. Waist-band, dividing line, and anklets shown by incision.
65. (T.C. 126. Gen. Reg. 418), Trench C0 (3):-
Middle part. Waist-band and dividing line, front, shown by incision.
66. (T.C. 217. Gen. Reg. 1035), Trench B2 (1):-
Lower part preserving part of cross-bands (*Chhanna-vira*) with applied bosses at the waist-band from which hang double strings over the thigh. Body made in two separate parts, right and left and then joined later. (See above Nos. 42-46). Plate. XXVII, No. 1.
67. (T.C. 96. Gen. Reg. 277), Trench C0 (2A):-
Middle part. Pudenda, waist-band, and dividing line shown by incision.
68. (T.C. 19. Gen. Reg. 76), Trench A0 (1) Pit No. 1:-
Middle part. Left hand broken. Breasts and part of one neck-band preserved.
69. (T.C. 559. Gen. Reg. 3652), Trench K11' (1):-
Head with head dress broken. Has a rosette on the left ear over a hanging hair lock, trace of forehead band, right side ornaments broken.
70. (T.C. 570. Gen. Reg. 3778), Trench A8' (3):-
Bust with arms and ornaments on the right side of the face broken, neckband also gone, has a triangular head-dress with rosettes, only one preserved over the left ear from which hangs down an ear pendant. Incised bosses over the head dress and also a forehead ornament. Plate. XXVII, No. 10.
71. (T.C. 572. Gen. Reg. 3791), Trench A3' (2):-
Head simple with a small forehead ornament and traces of a single neckband.
72. (T.C. 554. Gen. Reg. 3992), Trench A8' (3):-
Torso with right arm broken. Steatopygy extremely prominent. Incised line between breasts. Pudenda, waist-band and dividing line incised.

73. (T.C. 516. Gen. Reg. 2881), Trench A8' (1):-
Torso with arms and left hip broken. Has a breast ornament. Waist-band and dividing line incised.
74. (T.C. 523. Gen. Reg. 2976), Trench A8' (3):-
Upper part without head. Has a single neck-band with applied breasts not punctured, front part smooth but back side rough.
75. (T.C. 522 Gen. Reg. 2969), Trench A9' (1):-
Lower part upto the ankle, cross-band (*Chhanna-vira*), waist-band and dividing line shown by incision.
76. (T.C. 567. Gen. Reg. 3731), Trench A8' (3):-
An unusual variety of the lower part, has pillar-like legs without any incision, the buttocks are extremely prominent, having waist-band painted black and also cross-bands (*Chhanna-vira*) painted black. Plate. XXVII, No. 8.
- 77-84. (T.C. 527. Gen. Reg. 3078, Trench A9' (2); T.C. 535 Gen. Reg. 3271, Trench I 8' (1); T.C. 529, Gen. Reg. 3106, Trench K8' (1); T.C. 526. Gen. Reg. 3005, Trench A11' (2); T.C. 594. Gen. Reg. 4014, Trench A8' (2). T.C. 538. Gen. Reg. 3293, Trench A9' (3); T.C. 571. Gen. Reg. 3779, Trench A8' (3); T.C. 547. Gen. Reg. 3420, Trench A7' (3). All lower parts partly with Pudenda, waist-band and dividing line incised, the last two having breast ornament.

PERIOD-I

85. (T.C. 47. Gen. Reg. 143), Trench E1 (1):-
Upper part including breasts but arms and head-decoration broken. Two neck bands and ear-pendants preserved.
86. (T.C. 76, Gen. Reg. 204), Trench E1 (2):-
Only left half of the upper part with head and face partly broken. One breast, one arm, one roundel at the left ear with the hair plait falling over the ear, three neck-bands and part of breast-pendant preserved. Same technique of manufacture as Nos. 42-46. Plate. XXVI, No. 11.
87. (T.C. 267. Gen. Reg. 1486), Trench E0 (1) pit No. 2:-
Middle part with extended arms and one neck-band and a breast-pendant. At the back black painted lines representing two hair braids.
88. (T.C. 41C. Gen. Reg. 132), Trench E0 (1), pit No. 1:-
Body showing two neck-bands with a breast-pendant. Arms broken.
89. (T.C. 38. Gen. Reg. 128), Trench E0 (1), pit 1:-
Lower half including the breast-pendant. Pudenda, waist-band, anklets and dividing line shown by incision.

90. (T.C. 98. Gen. Reg. 281), Trench E0 (2):-

Middle part. Pudenda, waist-band and dividing line shown by incision.

Type-II—Baroque Lady with Head Prepared in Mould.

91. (T.C. 646. Gen. Reg. 4328), Trench A12' (6):-

The only example found in the excavation belonging to the early levels of the Scytho Parthian period i.e. IVB. It is preserved upto the breasts including the right arm made by rough modelling with hands. The fingers in the hands are incised and further three lines incised on the wrist suggesting bangles. The back is flat. The head upto the neck-band is prepared in a single mould to which incised eyelobes and mouth have been applied later. The head is richly decorated imitating the triangular head-dress with rosettes at the corners, roundels at the ears and decorated forehead band. See Gordon (his article IV P. 149, Pl. X. 7 and 8) Plate. XXVII, No. 9.

Type-III — Double Moulded Solid Figurines.

Only two examples of this type were found in 1964 excavation, both coming from middle layers of the Greek period. In the first example the lines of joints are clearly observed but the second example being broken is dubious. Both of them show very fine face.

92. (T.C. 650. Gen. Reg. 4275), Trench K9' (8):-

A nude figure of cupid in round, feet broken, holding a bird with left hand and feeding with the right. Face is slightly tilted to the right. Navel is shown with a dimple, curly hair is applied later and the male organ distinctly visible. Left leg slightly forward. Style classical. Plate I and XXIII

93. (T.C. 651. Gen. Reg. 4277), Trench A8' (8):-

Head showing a beautiful face with an extra scarf applied round the face, red washed, pegged for attachment. Plate XXXIII, No. 2

Type-IV — Double Moulded Hollow Figurines.

These are subdivided in two main varieties: (A). female figurines and (B) Male figurines. Both the varieties are shown in complete round and are the product of two moulds, back and front, the inside being hollow. Only one example (No. 105) has a stone within and appears to have been used as a rattle. While the female figurines are completely nude, the male examples show some kind of dress. No. 132 has an Indian *dhoti*.

Gordon (article IV PP. 160-61) describes the method as follows. "The nude female figures show a large range of what must be progressive deterioration. The best types are cast from excellently modelled originals, their technique being as follows: The bodies are hollow, and show a good naturalistic depth, being cast in two moulds and joined round the sides. The heads are solid, even in moderately large examples, and are produced by the back moulded portion being impressed on the clay cone, and the moulded face-mask being fitted to the front of this cone and the joint worked over. The

bodies of these figures are beautifully modelled, displaying a restraint and accuracy of anatomy which has nothing of the contemporary Indian exuberance." To this it may be added that a few examples also show solid well modelled feet with clearly defined toes on a triangular base. This means that these figurines were meant to stand on a base.

No complete example was found in our excavation. We recovered only one variety of head having a wreath of the laureate type with a later degeneration. All of them have a single braid behind and an oval bun ("plate" of Gordon) at the back of the head. At the point of joint between the legs and feet anklets are provided.

In our excavation the type is found in periods IV, III & II. The figurines are described under two varieties period-wise:-

Variety-A — Female Figurines.

PERIOD-IV (b) & IV (a)

94. (T.C. 468. Gen. Reg. 2531), Trench D1 (10):-
Middle part, only front, breasts prominently shown and the line in the middle of the body through the breasts well defined. Not well fired.
95. (T.C. 455. Gen. Reg. 2443), Trench B5 (7):-
Lower part above knee, only back portion, showing prominently hip, line between the hips and lower part of the hair braid well fired.
96. (T.C. 489. Gen. Reg. 2616), Trench B0 (10):-
Only feet on a triangular base. Toes well formed, ill fired, grey in colour.
97. (T.C. 498. Gen. Reg. 2688), Trench B1 (10):-
Head of a female showing Roman type face with ornamental hair-doing on the forehead and a single braid hanging behind the head. Over the head a wreath of the laureate type, the flower on the sides but centre vacant. Plate XXVIII. No. 2
98. (T.C. 469. Gen. Reg. 2533), Trench D1 (10):-
Female head. Similar to No. 97, but face bigger.
99. (T.C. 589 Gen. Reg. 3974), Trench I 11' (6):-
Bust with right arm, part of neck, and left hand broken, tip of nose and right side of the wreath damaged. It is a well made figure having the conventional laureate leaf over head with hair parted in the middle and tied in a single braid hanging behind with an oval bun at the back of the head. This is the only example found in this excavation suggesting this type of head as part of the double moulded hollow figurine. No well fired. Surface grey. Plate XXVIII. No. 10.

100. (T.C. 582. Gen. Reg. 3912), Trench A10' (6):-
Head with nose and chin damaged. Has laureate wreath over head and oval bun at the back of the head from which falls a braid. Plate XXVIII No. 5.
101. (T.C. 751 Gen. Reg. 3838), Trench A7' (5):-
Fragment of the left part of wreath.
102. (T.C. 629. Gen. Reg. 4192), Trench A8' (6).
Head with the back part damaged. Face is comparatively broader, has a wreath with three circular discs and two extra at the ears, traces of braid behind. Plate XXVIII No. 3
103. (T.C. 641. Gen. Reg. 4323), Trench A10' (5):-
Head with stylised wreath and two discs one on either side but has zigzag incised lines in the middle and at the ends. The back of the head has an oval bun with braid hanging down. Plate XXVIII, No. 1 (See also below No. 109).
104. (T.C. 546. Gen. Reg. 3408), Trench A9' (5):-
Figurine with head and arms gone, standing on a flat base, partly broken. The legs are rather fat, showing the muscular folds at the back of thigh, has an anklet, a raised navel and part of the braid at the back. Plate XXIX, Nos. 2 and 2 a.
105. (T.C. 648. Gen. Reg. 4330), Trench A11' (5):-
Figurine with head, hands and feet broken, has well formed buttocks, navel shown by dimple, full breasts with raised nipples and braid behind the back. It has a stone in its hollow and appears to have been used as a rattle. Plate Nos. 1 and 1 a.
106. (T.C. 647. Gen. Reg. 4329), Trench A12' (6):-
Lower part with feet and front portion broken, has well formed legs and part of the braid behind.
107. (T.C. 619. Gen. Reg. 4147), Trench A8' (5):-
Lower part of the legs standing on a flat base, has an anklet on each ankle, not well fired. Plate XXIX, No. 5.
108. (T.C. 748. Gen. Reg. 3175), Trench A10' (5):-
Only feet with anklet on a flat base.

PERIOD-III

109. (T.C. 244. Gen. Reg. 1243), Trench A2 (4) Pit 1:-
Head, face broken. Similar to 103, but the wreath is much stylized. Its sides are vacant but the central part shows incisions suggesting flowers.

110. (T.C. 555. Gen. Reg. 3614), Trench A3' (4):-
Head with wreath of the conventional laureate type, has an oval bun with a braid. Plate XXVIII, No. 7.
111. (T.C. 558. Gen. Reg. 3637), Trench A2' (5):-
Head with stylised wreath as in No. 109.
112. (T.C. 564. Gen. Reg. 3711), Trench A4' (4):-
Only lower part with feet broken, has a part of braid behind.
113. (T.C. 750. Gen. Reg. 3717) Trench A6' (6):-
Only left part of the wreath, grey in texture.
114. (T.C. 590. Gen. Reg. 3982), Trench A3' (5):-
Fragment of the front portion of the female body.
115. (T.C. 599. Gen. Reg. 4065), Trench A8' (4):-
Head with traces of wreath, has an oval bun at the back of the head and braid. Grey in colour. Plate XXVIII, No. 9.
116. (T.C. 569. Gen. Reg. 3776), Trench J8' (4):-
Only legs with feet broken, showing well formed thigh and calf.
117. (T.C. 580. Gen. Reg. 3882), Trench A6' (5):-
Similar to No. 116, but front portion of the left leg broken.
118. (T.C. 576. Gen. Reg. 3858), Trench A2' (5):-
Only hip preserving the bushy end of the braid.
119. (T.C. 597. Gen. Reg. 4059), Trench A8' (4):-
Only front part from waist to thigh. Right portion broken.

PERIOD-II

120. (T.C. 215. Gen. Reg. 1032), Trench B5 (1):-
Torso (upper part only) with arms hanging by the side as in type (V). Very small hollow inside the body. Fired red.
121. (T.C. 231. Gen. Reg. 1131), Trench A4 (1):-
Female legs with feet, base broken. Not well fired.
122. (T.C. 413. Gen. Reg. 2269), Trench B4 (3):-
Head, front broken, single braid behind the head.
123. (T.C. 186. Gen. Reg. 850), Trench C0 (2A). pit-2:-
Head, back part broken. Face and the front hair-do preserved. Wreath missing. Plate XXVIII, No. 6.
124. (T.C. 169. Gen. Reg. 698), Trench B1 (3):-
Head, very crude, wreath as in No. 94.

125. (T.C. 513. Gen. Reg. 2863), Trench A2' (1):-
Bust with right side and arms broken. Head is without wreath but has four plaits going behind and finally joined in two braids. Not well fired. Plate XXVIII, No. 8.
126. (T.C. 43. Gen. Reg. 3384), Trench J11' (2):-
Head, with incised wreath, has an oval bun at the back of the head and a braid. Very crude.
127. (T.C. 540. Gen. Reg. 3304), Trench J11' (2):-
Head with incised lines suggesting combed hair. Has an oval bun with a braid behind. Plate XXVIII, No. 4.
128. (T.C. 585. Gen. Reg. 3933), Trench J11' (3):-
Head with a crude wreath, has an oval bun with a braid.
129. (T.C. 552. Gen. Reg. 3529), Trench I 8' (2):-
Torso with hands broken, has a braid behind. Plate XXIX, No. 4.
130. (T.C. 749. Gen. Reg. 3746), Trench I 11' (3):-
Fragment of a wreath.

Type-IV — Variety-B: Male figurines.

PERIOD-IV

131. (T.C. 550, Gen. Reg. 3515), Trench A9' (6):-
Headless body, lower right portion broken, holding probably an overflowing vase with left hand at the chest. It shows prominently well built muscles, in chest and back, and has something on the shoulder now broken. Plate XXIX, No. 6.

PERIOD-III

132. (T.C. 586. Gen. Reg. 3890), Trench A11' (4):-
Part from navel to thigh, putting on an Indian *dhoti* held at the waist by a girdle and the ends falling in front in double fold. Plate XXIX, No. 3.

PERIOD-II

133. (T.C. 591. Gen. Reg. 3990), Trench JII' (3):-
Bust with a tuft of hair to the top right and the remainder combed behind. Left hand folded at the chest holding something, right hand broken. Probably Kubera (cf. Gordon, article-IV, P. 160). Plate XXIX, No. 7.
- 133-A. (T.C. 539. Gen. Reg. 3303), Trench J11' (2):-
Body from neck to waist, only front portion, back missing, wearing a

tight fitting dress (probably) of the Kushana type, front open with the right hand bent and shown forward while the left hangs down.

Type-V — Single Moulded Flat Figurines.

These figurines are the product of a single flat mould. They are all in the form of plaques, with the figure impressed on the front and the back left plain. Hence Sir John (*Taxila* PP. 443-44) calls them ex-voto plaques. The female figurines have a round face, slight nose, arms generally extended down by the side, with fingers not shown, breasts marked and legs joined together having a single anklet. The figures make almost a rhombus shape. Only one example from Sirkap stratum II has been illustrated by Sir John (see his plate 132 No. 6). Gordon (Op. cit. PP. 151 ff) discusses this type under the title "The Early Moulded Figures" and assigns them from c. 200 B.C. to the commencement of the Christian era. He, however, includes in this type many other varieties not found in our excavation. In our excavation they are found in periods IV, III, II and I. They are not recorded in the Greek levels at all.

The type is divided into two varieties:

(A). Female Figurines and (B) Male Figurines.

They are described below.

Variety-A — Female Figurines.

PERIOD-IV

134. (T.C. 463. Gen. Reg. 2474), Trench A5' (7):-
Middle part. Head, arms and legs missing. Breasts prominently shown. Well fired.
135. (T.C. 596 Gen. Reg. 4049), Trench III' (6):-
Torso with breasts shown slightly, arms stretched straight by the side. red washed.
136. (T.C. 587 Gen. Reg. 3941), Trench A7' (5):-
Torso with arms broken. breasts applied separately, left one broken. Grey in colour.

PERIOD-III

137. (T.C. 248 Gen. Reg. 1267), Trench A0 (4):-
Middle part, head and legs missing. Right arm extended but left one akimbo. Bangle at the left wrist and a torque at the neck. Not well fired. Plate XXX. No. 1.
138. (T.C. 363, Gen. Reg. 2010), Trench A1' (4):-
Middle part. Head, legs and part of arms broken. Dark wash over the figure.

139. (T.C. 577 Gen. Reg. 3863), Trench A8' (4):-
Torso with arms broken, breasts applied separately. Brown in colour. Plate XXX, No. 4.
140. (T.C. 565. Gen. Reg. 3723), Trench A2' (5):-
Torso with arms broken, breasts applied separately. Not well fired.
141. (T.C. 562. Gen. Reg. 3609), Trench A8' (4):-
Torso with hands broken, breasts just slightly shown. Burnt black.
142. (T.C. 649. Gen. Reg. 4286), Trench A3' (4):-
Lower part from the waist upto the ankles. Burnt red.

PERIOD-II

143. (T.C. 339. Gen. Reg. 1870), Trench F1 (5):-
Well preserved figurine, only legs below knee and part of head broken. Fired red. Plate XXX, No. 7.
144. (T.C. 247. Gen. Reg. 1259), Trench C1 (4):-
Middle part. Head, legs and left arm missing; right arm partly broken. Not well fired.
145. (T.C. 306. Gen. Reg. 1666), Trench A5 (3):-
Middle part. Head and legs below knee missing. Breasts applied separately. Not well fired. Plate XXX, No. 2.
146. (T.C. 111 Gen. Reg. 325), Trench A0 (3):-
Only legs below knee with an anklet going over the two feet.
147. (T.C. 424. Gen. Reg. 2980). Trench A6' (3):-
Lower part from the waist downward, standing on a flat base partly broken. Anklets at the feet. Plate XXX, No. 5.
148. (T.C. 592. Gen. Reg. 4002), Trench A9' (2):-
Torso with the right arm partly broken. Breasts applied separately. Not well fired. Plate XXX, No. 8
149. (T.C. 530. Gen. Reg. 3147), Trench A2' (3):-
Headless figurine with its flat base and left arm broken, breasts very slightly visible. Plate XXX No. 3
150. (T.C. 532. Gen. Reg. 3182), Trench A11' (3):-
Torso with the right arm partly broken, breasts just slight. Burnt black.
151. (T.C. 584. Gen. Reg. 3919), Trench J8' (3):-
Body between the neck and the waist, arms broken. Breasts prominently given. Navel shown by dimple.

152. (T.C. 568. Gen. Reg. 3733), Trench A8' (3):-
Headless figurine with bent legs, burnt partly black.
153. (T.C. 525 Gen. Reg. 2981), Trench A6' (3):-
Upper part of the body showing breasts prominently.
154. (T.C. 515 Gen. Reg. 2872), Trench A2' (1):-
Body from neck to waist with applied breasts which are further punctured.
155. (T.C. 542. Gen. Reg. 3353), Trench A7' (3):-
Torso with breasts slightly shown, burnt partly black.

PERIOD-I

156. (T.C. 72. Gen. Reg. 189), Trench E0 (2):-
Middle part. Head, legs and hands broken. Breasts prominently shown. It is a thick set example with surface rather rough.

Variety-B — Male Figurines.

PERIOD-III

157. (T.C. 553. Gen. Reg. 3579) Trench A4' (5):-
Seated figure with its upper part broken. Hands having bangles placed in the lap, has a raised waist-band.
158. (T.C. 560. Gen. Reg. 3658), Trench A5' (4):-
Seated in Indian fashion, having tight-fitting dress (Kushana) upto the knees, the part above the waist broken.

PERIOD-II

159. (T.C. 544. Gen. Reg. 3385), Trench JII' (2):-
Torso, putting on probably Indian dhoti held at the waist by a girdle. Left leg bent forward, belly large, both hands at the chest holding something, now broken. Kubera Plate XXX, No, 6
160. (T.C. 537. Gen. Reg. 3287), Trench A9' (3):-
Torso having a lower garment showing folds as in the Gandhara sculptures, another scarf on the left shoulder. Right hand on the waist and left at the thigh. Burnt black.

PERIOD-I

161. (T.C. 200. Gen. Reg. 942), Trench B2 (1):-
It is a dwarf with lounging legs, right arm on the body, left portion of the body broken. Head missing.

Type-VI — Gandhara Heads.

These are well formed heads portraying beautiful face of the well known Gandhara stone examples with different types of head dress, obviously made in moulds.

PERIOD-II

162. (T.C. 199. Gen. Reg. 941), Trench B0 (3):-
Head of a male (?) with hair trimmed and combed in front, and beautiful head dress, made in mould.
163. (T.C. 135. Gen. Reg. 484), Trench C0 (3):-
Head of a male with a conical cap, made of red clay. Plate XXXIII No. 1
164. (T.C. 557. Gen. Reg. 3427), Trench J11' (2):-
Beautiful head, prepared in a mould, has curly hair over the forehead and probably a cap (?) now broken. Plate XXXIII No. 5
165. (T.C. 541. Gen. Reg. 3322), Trench A3' (1):-
Head with hollow back, showing a longish face with curly hair over the forehead held by a scarf hung behind. Nostrils pierced and eye-balls shown. Red-slipped. Plate XXXIII, No. 3

Type-VII — "Emblemeta" figurines on bowls.

These figurines are embossed on the inside of the bowls by a mould. No complete bowl was found in the excavation. Only fragmentary base with the figurine has been recovered. In a few examples the base is flat. On close examination the technique appears to be peculiar. The base is made separate with the embossed figure and then it is joined to the bowl. Out of the six examples found, five came from the late Parthian levels which also yielded coins of Azes, Azilizes, Gondophares and Maues. Only one was found in the Middle Kushana layer i.e. of the time of Kanishka. This last appears to be a survival and local copy. The main period of occurrence must be in the late Parthian age i.e. first half of the 1st century A.D. This is also the date assigned by Col. D.H. Gordon (*Op.-cit* PP. 164-65). Two types of figurines have been found: the first group is a bust of a lady having a flat head-dress, curly hair over the forehead and part flowing on the shoulders, and a scarf between the prominently shown breasts. The second group is a male standard bearer of the type illustrated by Gordon.

IST GROUP

166. (T.C. Gen. Reg. 3877), Trench A7' (5):-
Fragment of a flat-based bowl, thin in section, with the embossed figurine of a lady. Fired red. Plate XXXI No. 1
167. (T.C. Gen. Reg. 4139), Trench A8' (5):-
Fragment of a round bottomed bowl, thin in section, with the embossed figurine of a lady. Fired red. Plate XXXI No. 2

168. (T.C. Gen. Reg. 4140), Trench A8' (5):-
Fragment of a round bottomed bowl, thin in section, with the embossed figurine of a lady. Fired red. XXXI, No, 3
169. (T.C. Gen. Reg. 4392), Trench A8' (5):-
Fragment of a flat bottomed bowl, thin in section, with the embossed figurine of a lady. Fired red and then pink-slipped. Plate XXXI, No. 4

2ND GROUP

170. (T.C. Gen. Reg. 4297), Trench A12' (5):-
Fragment of a flat bottomed bowl slightly thicker in section, with the embossed design of a male standard bearer. Fired red and red-slipped. Plate XXXI, No. 5.
171. (T.C. Gen. Reg. 1572), Trench A3 (2):-
Period Middle Kushana. Fragment of a flat-bottomed bowl, thick in section, with the embossed design of a male standard bearer. Fired red. Plate XXXI, No. 6.

Type-VIII — Hand-made flat female figurines.

These are technically related to type I and more closely to Sir Mortimer Wheeler's. Pl. XXI. 6. (Page 109 of his book), with the only difference that the present examples have no baroque head-dress. They appear to have been made in three parts: head, legs and body. The body is beaten flat, front and back, having pointed arms and applied breasts with a girdle at the waist. To this is attached a head with variant head-dress, the nose being pinched, eye-balls applied separately and then incised, mouth sometimes applied and incised and ears also applied and pierced. At the joint there is a neck-band. The legs are splayed and pudenda covered by a piece of cloth. Most of the examples come from the Greek levels but a few survive later.

PERIODS V AND VI

172. (T.C. 630. Gen. Reg. 4148), Trench K9' (8):-
Pink coloured figurine with traces of breasts and navel, has girdle incised, a single neck-band, hair tied over head in a flat bun, legs broken, Plate XXXII, No. 1.
173. (T.C. 616. Gen. Reg. 4117), Trench K9' (7):-
Female figurine with the breasts gone, has its right arm incised for bangles and fingers, left arm broken, deep neck-band, peaked cap, pierced ears, chain type of girdle, the cloth covering the female part, legs broken. Plate XXXII. No. 2
174. (T.C. 604. Gen. Reg. 4092), Trench K9' (7):-
Torso with the left arm and legs broken, traces of breasts, neck-band, cloth over pudenda, incised girdle, and right hand having fingers incised.

175. (T.C. 604. Gen. Reg. 4091), Trench K9' (7):-

Torso with the right leg and left hand broken, has applied breasts, right hand fingers incised, girdle incised with a hanging bell on left thigh, pudenda covered by cloth.

PERIOD-III

176. (T.C. 593. Gen. Reg. 4004), Trench A8' (4):-

Torso with left arm broken, left breast punctured, traces of neck-band, girdle incised and an incised line running from left shoulder to the right side probably suggesting sacred thread (*upavita*), the buttocks clearly marked. Plate XXXII, No. 3.

PERIOD-II

177. (T.C. 573. Gen. Reg. 3798), Trench J11' (2):-

Torso with the breasts gone, neck-band preserved, girdle incised and cloth over the pudenda.

178. (T.C. 534. Gen. Reg. 3225), Trench A3' (2):-

Fragment of body, arms gone, neck-band preserved, punctured breasts applied, and a dotted line goes from the left shoulder to the right side in front.

Type-IX — Hand-made Toys.

PERIODS V & VI

179. (T.C. 638. Gen. Reg. 4268), Trench K9' (8):-

Seated female figurine with head, arms and legs broken, has punctured applied breasts. It is nude.

180. (T.C. 595. Gen. Reg. 4000A), Trench A11' (7):-

Seated male figure with a back rest, legs broken, right arm on the chest and left on the leg, has a flat cap, applied ears, mouth incised, nose and face modelled and long eyes incised, appears to be a mimic. Plate XXXII, Ne. 4.

PERIOD-IV

181. (T.C. 574. Gen. Reg. 3809), Trench A2' (6):-

A fragment of a crudely made hand.

PERIOD-III

182. (T.C. 381. Gen. Reg. 2094), Trench A5 (4):-

This is the type called by Sir Mortimer "Archer" (See his plate XXVII). The figure is made by hand, nose pinched and the eyes pierced. Plate XXXII, No. 5.

183. (T.C. 575. Gen. Reg. 3857), Trench A2' (5):-
A dwarf with back and front flat, has applied cross-bands (*Chhannavira*), waist-band, a single braid and incised anklets. Plate XXXII, No. 5
184. (T.C. 566. Gen. Reg. 3726), Trench A8' (4):-
A flat bottomed seated doll with dotted cross bands and hair left loose behind, head and arms broken.

PERIOD-II

185. (T.C. 167 Gen. Reg. 651), Trench B1 (2):-
Puppet, upper part only on a flat base. Head missing, arms stretched to the front with hands pierced for strings.
186. (T.C. 194. Gen. Reg. 907), Trench A4 (1):-
Upper part of a figurine with breasts separately applied. Nose pinched, ears, mouth and eyes shown by incision, back flat. Fired red.
187. (T.C. 54. Gen. Reg. 153), Trench B0 (2):-
Crudely made human figure in a sitting pose, right leg and arms broken, left leg bent. Not well fired.
188. (T.C. 485 Gen. Reg. 2618), Trench B2 (3):-
Hand made figurine. Upper part only, arms out-tretched with holes pierced through the arms for strings, mouth pinched and hair shown by a cone on the top left. Plate XXXII, No. 7.
189. (T.C. 490. Gen. Reg. 2649), Trench E1 (5):-
Crudely made human figurine. Upper part only, arms and legs broken, breasts prominently shown, face pinched, mouth and eyes incised, back flat.
190. (T.C. 195. Gen. Reg. 914), Trench A0 (1) pit. 1:-
Figurine with head, arms and legs broken, made on a flat back, left breast (punctured)?, navel, girdle and the male organ applied separately. Plate XXXII, No. 8.
191. (T.C. 36. Gen. Reg. 123), Trench C0 (2):-
Broken male figure. Only middle part, legs apart, male organ applied separately, girdle incised with a boss applied on the left and a "Chadar" (Scarf) shown by incision on the right side.
192. (T.C. 514. Gen. Reg. 2865), Trench A2' (1):-
Seated male figure with the back rest as No. 180, has dotted cross bands and waist-band, right arm on the chest and left by the side, head and legs broken.

193. (T.C. 563. Gen. Reg. 3702), Trench I 11' (3):-
Seated female figure on a back rest like No. 192, has its left arm on the lap, right arm, head and legs broken, and has applied breasts.
194. (T.C. 520 Gen. Reg. 2862), Trench I 11' (1):-
Seated figure with a back rest like No. 193, has its navel prominently incised, arms, legs and head broken.
195. (T.C. 517, Gen. Reg. 2894), Trench A2' (1):-
A toy soldier with a dagger on the left side, has a hole at the bottom, a neck band and shoulders embossed, head and arms broken. Plate XXXII, No. 9.
196. (T.C. 528. Gen. Reg. 3102), Trench J8' (2):-
A drummer seated with a back rest like No. 194, Head, legs and right arm broken. Plate XXXII, No. 10.
197. (T.C. 551. Gen. Reg. 3516), Trench A8' (2):-
Seated figure like 193, head, legs and right arm broken.
198. (T.C. 583. Gen. Reg. 3095), Trench A9' (3):-
Seated figure like 197, with its male part prominently shown, head, right arm and part of legs broken. Plate XXXII, No. 11.
199. (T.C. 545. Gen. Reg. 3408), Trench K11' (2):-
A drummer with its upper part broken seated on a legged seat, only one leg intact, the figure has its legs hanging down and the drum in the lap.
200. (T.C. 556 Gen. Reg. 3620), Trench J11' (2):-
Headless body of a pregnant lady with hanging breasts. Arms and lower part broken. Plate XXXII, No. 13.
- 200-A. (T.C. 709. Gen. Reg. 3071), Trench A3' (1) Pit. (1):-
Seated figure with wide legs. hands and head broken. The left leg bent and hanging down.

PERIOD-I

201. (T.C. 292. Gen. Reg. 1589), Trench F0 (3):-
Male torso. head, arms and legs broken; one neck-band, applied separately; girdle incised, male organ with testicle shown but strangely enough punctured breasts, applied separately. Plate XXXII, No. 12.

Type-X — Female Figurines on Pottery Tank.

These figurines have a flat base made to sit on the rim of a pottery tank. They are generally sitting on a high stool with legs joined together to the front, hanging down. The back is flat and the front is modelled. The face is slightly shown having a tipped nose and ears, with a high coiffure consisting of tricorn.

PERIOD-IV

202. (T.C. 449. Gen. Reg. 2422), Trench B1 (7):-
Only head. Poorly fired. Plate XXXIII, No. 6.

PERIOD-III

203. (T.C. 420. Gen. Reg. 2301), Trench A1 (5):-
Complete figure but nose and two horns broken. Arms hanging down the sides. Trace of slip on the body. Plate XXXIII, No. 4.

PERIOD-II

204. (T.C. 122. Gen. Reg. 377), Trench C1 (3):-
Head with part of coiffure broken. Similar to No. 202.
205. (T.C. 79 Gen. Reg. 216), Trench B1 (2):-
Seated figure with a bird (broken) in the left hand. Head, hands and legs broken.
206. (T.C. 519. Gen. Reg. 2911), Trench A2' (1):-
Head with a peaked cap, ears preserved, face blurred and nose tip broken.

Type-XI — Miscellaneous Figures.

207. (T.C. 44. Gen. Reg. 138), Trench E1 (1) Period I:-
Moulded female head, turned to right with hair tied in a knot to the top right. Ear ornaments broken.
208. (T.C. 55. Gen. Reg. 154), Trench B0 (1) Pit. Z. Period-I:-
An exact copy of the above No. 207, ear ornaments preserved. Made of red clay.
209. (T.C. 414. Gen. Reg. 2271), Trench B0 (2), Period II:-
Female head with an elaborate head dress having tricorn over head and rosettes at the ear, forehead brought forward like the hood of a serpent, probably a *Nagina* figure. Plate XXXIII, No. 7.
210. (T.C. 603. Gen. Reg. 4090), Trench A9' (9) Period V:-
A very rough specimen of the front part of the female body without head but including the arms which are hanging by the sides, hollow within. The back part which was made separately is missing. Technically it is made in mould.
211. (T.C. 579. Gen. Reg. 3881), Trench A9' (4) Period III:-
Back part of the body with head and arms broken, having double braid, probably made in mould. The front part missing.

212. (T.C. 625. Gen. Reg. 4134), Trench K9' (8) Period V:-

Part of a female body with arms (now broken) hanging along the sides, breasts prominently shown, portion below waist broken, has a simple neck-band, appears to have been prepared in a single mould. Back is flat. Very rough like No. 210.

213. (T.C. 518. Gen. Reg. 2092), Trench A3' (1). Period-II:-

Hand-made broken figure from waist to knee, has applied girdle.

214. (T.C. 531. Gen. Reg. 3150), Trench J7' (1):-

Middle part of male figure with head, arms and legs broken; has a tight fitting dress, open neck and broad shoulders.

Type-XII — Fiddle - Shaped figurine.

215. (T.C. 268. Gen. Reg. 1409) Trench B1 (4).

PERIOD-III

Fiddle-Shaped human figurine with head missing, has incised cross-band (*Channavira*) with applied bosses one in front and the other at the back, incised waist-band, dots in the middle of the waist-band and pointed arms, but no legs. Sir Mortimer has illustrated one example (*Charsada*, Plate XXIII B). They have also been found in Bhir Mound and at Sar Dheri. Plate XXX No. 9.

PART-II

ANIMAL AND BIRD TERRACOTTAS

SECTION - A

BULLS

Animal figurines are found in large number at Shaikhhan Dheri. Among them the largest number is of bulls unlike Taxila, where their number is few. In all 138 bulls have been found in the excavation through all the layers from bottom to the top. The greatest number comes from the Middle Kushana period probably because this period was uncovered in the widest area of the excavation.

All these bull figurines are made by hand and burnt red. The general method used is rolling the clay in hand and then producing the limbs and the body by pressing or further extension. In all these figurines the tail, which is short one is applied separately as if it falls either straight down or to one side. In all these cases the hump is prominently given. In some of them it is straight up while in others it is placed at an incline. There is only one exception in the case of the bull-stopper (No. 36) which has got no hump. The horns are also prominently given over the head. They are of two main types: (a) bulls with short horns bent forward, and (b) bulls with short horns projecting upwards. On the basis of these horn types it is possible to classify these figurines, but the

following classification is based on technological principles. On this basis we have made two broad categories:

- (a) Undecorated bull figurines.
- (b) Decorated bull figurines.

The classification made by Sir John Marshall (*Taxila* Volume II P. 457) of the bulls found by him on the basis of sizes does not hold good in case of Shaikhan Dheri. His type (b) "with hollow pipe like bodies" has not been found here at all. We have found quite a good number of bulls with their legs fully preserved. The legs are solid and stump-like. We found no example with holed legs. However, we found number of examples with string hole through the nose. All these examples belong to category (b). There are three exceptions (Nos. 3, 58 and 58A) which have holed hump, and hole through the nose for string, but fall in category (a) as it is not decorated. However, there are other examples in this category, in which attempts are made to bore holes from two sides above the mouth. The figurines are described below under the two main classes mentioned above.

(a) *Undecorated Bull Figurines.*

There are three main varieties in this category: (i) They include examples which have applied eyes. (ii) They include examples which have either circular eyes formed by incision and sometimes show extra scratches for nostrils and mouth, or have eyes pierced with a pointed needle. Those with circular eyes have broad foreheads. (iii) They include examples which do not show eyes at all. Their number is largest in this category.

VARIETY (i)

1. (T.C. 101. Gen. Reg. 289), Trench B0 (3). Period II.
Crudely formed bull with pinched body and face, circular balls applied for the eyes, three legs, part of hump and horns broken. Plate XXXIVa, No. 2.
2. (T.C. 46. Gen. Reg. 142), Trench F0 (1). Period I.
Roughly made figurine having pierced applied eyes, one horn straight up preserved, has short legs.

VARIETY (ii)

3. (T.C. 865. Gen. Reg. 4111), Trench K9' (7). Period V.
Only fore part of the bull with holed hump, horns bent forward, eyes incised, nostrils pierced but mouth broken, string piercing on either side of the mouth. Plate XXXIVb, No. 2.
4. (T.C. 509. Gen. Reg. 2749), Trench B1 (15). Period VI.
Figurine having horns bent forward incised circular eyes, nose and mouth pierced, only two front legs preserved, hump broken. Plate XXXIVa, No. 1.

5. (T.C. 842. Gen. Reg. 4025), Trench K9' (6). Period IV.
Forepart of a bull with horns, hump and legs broken, has circular eyes, pierced nose, and traces of string piercing on either side of the mouth.
6. (T.C. 753. Gen. Reg. 3300), Trench K9' (4). Period III.
Only face with circular eyes and pierced nose, and traces of string piercing on either side of the mouth.
7. (T.C. 854. Gen. Reg. 4050), Trench I 11' (4). Period III.
Bull's head with a projection on the forehead, has circular eyes, pierced nose, and traces of string piercing on either side of the mouth.
8. (T.C. 717. Gen. Reg. 3133). Trench A4' (4). Period III.
Bull with broken legs, hump and horns, has eyes and the mouth incised.
9. (T.C. 685. Gen. Reg. 2914), Trench A3' (1) Period II.
Forepart of a bull with horns bent forward, incised circular eyes, pierced nose, and traces of string piercing on either side of the mouth.
10. (T.C. 97. Gen. Reg. 280), Trench C0 (2A). Period II.
Forepart of a bull with horns bent forward but broken, incised circular eyes, pierced nostrils and traces of string piercing on either side of the mouth.
11. (T.C. 665. Gen. Reg. 2850), Trench A6' (1). Period II.
Forepart of a bull with right horn and mouth broken. Left horn going upward, has circular eyes.
12. (T.C. 797. Gen. Reg. 3718), Trench I 11' (3). Period II.
Bull with the legs and horns broken, has pinched mouth and pierced eyes, tail to one side and showing a hollow between the hips, red slipped. Plate XXXV, No. 1
13. (T.C. 715 Gen. Reg. 3107), Trench A3' (2). Period II.
Bull with legs, horns and tail broken, shows pierced ears, eyes and mouth incised, red slipped.
14. (T.C. 386 Gen Reg 2118), Trench B3 (2) Period II
Bull with legs, tail, hump and part of the horns broken, the horns bent forward, has pierced ears, eyes and incised mouth.
- 14 (A). (T.C. 511. Gen. Reg. 2770), Trench B1 (16). Period VI.
Head of a bull with short horns, incised circular eyes, string piercing on either side of the mouth.
- 14 (B). (T.C. 885. Gen. Reg. 4265, Trench A10' (8). Period V.
Head of a bull with horns bent forward, incised circular eyes, incised mouth and string hole through the nose.

- 14 (C). (T.C. 804. Gen. Reg. 3775), Trench A11' (2). Period II.
Bull with hump broken, has straight up horns, has short tail to one side, incised mouth, incised circular eyes and a circle between the horns.
- 14 (D). (T.C. 822. Gen. Reg. 3932), Trench J11' (3). Period II.
Crudely formed bull with one leg, part of hump and horns broken, has pierced eyes, pinched mouth and string hole through the nose.

VARIETY (iii)

15. (T.C. 493 Gen. Reg. 2664), Trench B5 (12). Period V.
Well formed bull in a dashing attitude, has short legs, horns broken, mouth pinched. Plate XXXV, No. 2.
16. (T.C. 877. Gen. Reg. 4186), Trench K9' (8). Period V.
Bull with legs and head broken, tail falling behind.
17. (T.C. 320 Gen. Reg. 1773), Trench A1 (7). Period IVA.
Bull with hind legs, partly broken, horns broken, mouth pinched. Plate XXXV, No. 4.
18. (T.C. 881. Gen. Reg. 4228), Trench A8' (6). Period IV.
Bull with head broken, tail to one side.
19. (T.C. 839. Gen. Reg. 4012), Trench J9' (5). Period IV.
Bull with the fore legs, horns and tail broken, hind legs short, mouth pinched, traces of red slip.
20. (T.C. 893. Gen. Reg. 4339), Trench A12' (6). Period IV.
Forepart of a bull with its hump broken but was placed over on extremely long bent neck, has short pointed horns going upward and ears side ways, mouth prolonged.
21. (T.C. 896. Gen. Reg. 4347), Trench A12' (6). Period IV.
Bull with head, legs and tail broken.
22. (T.C. 304. Gen. Reg. 1637), Trench A1 (6). Period IV.
Bull with broken legs and head.
23. (T.C. 832. Gen. Reg. 3989), Trench J10' (4). Period III.
Forepart of a bull with short legs, horns and ears, has its face down.
24. (T.C. 732. Gen. Reg. 3221), Trench A4' (5). Period III.
Bull with hump, hind legs and horns broken, has pinched mouth which is further incised.
25. T.C. 758. Gen. Reg. 3354), Trench A9' (4). Period III.
Bull with legs and horns broken, has mouth drawn forward with its end flattened.

26. (T.C. 317. Gen. Reg. 1700), Trench D0 (5B). Period III.
Hind part of a bull with one leg broken, tail falling behind, red washed.
27. (T.C. 180. Gen. Reg. 809), Trench B1 (3). Period II.
Well formed bull with one leg, tail and horns broken, mouth pinched. Plate XXXV, No. 3.
28. (T.C. 694. Gen. Reg. 2971) Trench A4' (2). Period II.
Fat bull with two legs and horns broken, has short tail, hump applied separately, mouth pinched, red washed.
29. (T.C. 121. Gen. Reg. 368), Trench D0 (4). Period II.
Crudely formed bull with horns broken, mouth pinched.
30. (T.C. 807 Gen. Reg. 3801), Trench J11' (2) Period II.
Bull with legs and hump partly broken, has short horns and traces of ears, slots for the eyes, mouth pinched.
31. (T.C. 225. Gen. Reg. 1080), Trench A2' (1) Period II.
Bull with the legs broken, has short tail to one side, short horns, one of which broken, side ears, mouth pinched.
32. (T.C. 441. Gen. Reg. 677), Trench C0 (2) Period I.
A small bull crudely formed with horns going upward, mouth pinched. Plate XXXV, No. 5.
33. (T.C. 144. Gen. Reg. 530), Trench D0 (4). Period II.
Bull with two legs and horns broken, mouth pinched.
34. (T.C. 512. Gen. Reg. 2788), Trench C3 (2) Period II.
A short bull with short horns and ears, pinched mouth.
35. (T.C. 208. Gen. Reg. 975), Trench C0 (2) Period I.
Forepart of a bull with horns broken, mouth pinched and incised
36. (T.C. 696. Gen. Reg. 2958), Trench A9' (1). Period II.
Bull stopper with upraised short horns and modelled mouth. This is actually a type by itself. Plate XXXIVb, No. 4.
37. (T.C. 536. Gen. Reg. 2891), Trench A4' (2), Period II.
Forepart of a bull with one leg and horn broken, one horn projected upward, mouth pinched.
38. (T.C. 697. Gen. Reg. 2964), Trench A7' (2). Period II.
Bull with legs, horns and mouth broken, tail also missing, shows traces of side ears, red washed.
39. (T.C. 698. Gen. Reg. 2997), Trench A8' (3). Period II.
Bull with one leg, horns and hump broken, mouth pinched and incised.

40. (T.C. 706. Gen. Reg. 3023), Trench I 11' (2). Period II.
Crudely formed bull with legs and head missing.
41. (T.C. 786. Gen. Reg. 3635), Trench I8' (3). Period II.
A small bull with head missing.
42. (T.C. 684. Gen. Reg. 2913), Trench A5 (1). Period II.
Bull of big size, body rough, head missing.
43. (T.C. 659. Gen. Reg. 2837), Trench J10' (1) Period II.
Small stumpy bull with the mouth slightly shown.
44. (T.C. 762. Gen. Reg. 3374), Trench A5' (3). Period II.
Hind part of a bull, traces of red slip.
45. (T.C. 670. Gen. Reg. 2957), Trench A2' (1) Period II.
Hind part of a bull with traces of tail.
46. (T.C. 788. Gen. Reg. 3646), Trench A8' (2). Period II.
Hind part of a bull with legs broken.
47. (T.C. 638. Gen. Reg. 2907) Trench A3' (1) Period II.
Head of a bull with horns slightly broken, mouth pinched, has string
piercing above the mouth.
48. (T.C. 609. Gen. Reg. 2879), Trench A8' (2) Period II.
Body of a bull with legs and head.
49. (T.C. 716. Gen. Reg. 3019), Trench A7' (3) Period II.
Fore part of a bull with one leg and head missing.
50. (T.C. 766 Gen. Reg. 3405), Trench A8' (3) Period II.
Bull with head and three legs missing.
51. (T.C. 699. Gen. Reg. 3002). Trench J8' (2). Period II.
Bull with head and legs missing.
52. (T.C. 720. Gen. Reg. 3149), Trench A7' (3). Period II.
Forepart of a bull with legs and one horn broken. Mouth pinched.
53. (T.C. 6. Gen. Reg. 22), Trench D0 (1). Period I.
Bull with fore-legs broken, tail not shown mouth pinched. Plate
XXXV, No. 6.
54. (T.C. 157. Gen. Reg. 549), Trench E0 (3). Period I.
Bull with one leg and head broken.
55. (T.C. 675. Gen. Reg. 2870), Trench A8' (1) Period II.
Forepart of bull with legs broken, mouth slight.

- 56. (T.C. 810. Gen. Reg. 3822), Trench A8' (3). Period II.
Bull with head and legs broken, red washed.
- 57. (T.C. 880. Gen. Reg. 4222), Trench A11' (2) Period II.
Headless bull, legs broken, extra hump on the back.
- 58. (T.C. 688. Gen. Reg. 2917), Trench A5' (1). Period II.
Forepart of a bull with holed hump.
- 58A. (T.C. 836. Gen. Reg. 4007). Trench J9' (5). Period IV.
A stumpy bull with legs, horns and mouth broken, has holed hump.
- 58B. (T.C. 789. Gen. Reg. 3664) Trench A10' (4) Period III.
Bull with horns, hump and legs broken, mouth pinched.
- 58C. (T.C. 445. Gen. Reg. 2393), Trench B0 (3) Period II.
- 58D. (T.C. 313. Gen. Reg. 1711), Trench B0 (1) Period I.
- 58E. (T.C. 508. Gen. Reg. 2744), Trench B3 (3) Period II.
Bodies of bulls with legs and heads broken.
- 58F. (T.C. 484. Gen. Reg. 2605), Trench D1 (13). Period V.
Hind part of a bull with legs partly broken, applied tail, red slipped.
- 58G. (T.C. 465. Gen. Reg. 2498), Trench C1 (3), Period II.
Forepart of a bull with head and legs broken.

(d) *Decorated Bull Figurines.*

These figurines are also made by hand, but they are distinguishable from the earlier category in so far as they bear one or another type of decoration on the body. The decorations take the form of dotted lines, probably signifying strings or incised lines having the same meaning, or nail head decoration over the forehead or applique decoration. According to these types of decorations we group them under four varieties:

VARIETY (i)

Under this variety fall those figurines which have dotted lines on the body and over the forehead. The head decoration takes two forms — either a simple horizontal line across the forehead as if tying both the horns with one string, and an extra string line coming between the horns, or a simple cross over the horn, as if two strings tying the horns separately, sometimes with an extra string line coming from behind. The dotted lines on the body vary from figurine to figurine. Where they are few in number, they appear to represent strings tied round the body with some load on the back. In other cases where the lines go even round the legs, the purpose is difficult to determine.

- 59. (T.C. 846. Gen. Reg. 4026), Trench K9' (7) Period V.
Bull with legs and hind part missing, has horns bent forward, incised

circular eyes, pierced nostrils, incised mouth and pierced string hole on either side of the mouth. Crossed dotted lines over the forehead and sparse lines on the body.

60. (T.C. 781. Gen. Reg. 3595), Trench A10' (7) Period V.
Front part of a bull with legs and one horn broken, the other horn bent forward, has incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, dotted crossed lines over the forehead and other lines on the body.
61. (T.C. 855. Gen. Reg. 4053), Trench A11' (7) Period V.
Bull with part of legs, hump, horns and mouth broken, has tail to one side, incised circular eyes, dotted cross lines over the forehead and profused lines on the body and tail. Plate XXXVIa, No. 1.
62. (T.C. 811. Gen. Reg. 3825), Trench A10' (6). Period IV.
Well preserved bull with only part of the hump broken, has stumpy legs with the tail to one side, horns bent forward incised circular eyes, incised mouth and nostrils, pierced string hole through the nose, dotted crossed lines over forehead and profuse lines on the body. Plate XXXVIa, No. 2.
63. (T.C. 860. Gen. Reg. 4083), Trench A8'. Period IV.
Bull with one leg, hump and part of the horns broken, has horns bent forward, tail to one side, incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, dotted cross lines over the forehead and profuse lines on the body. Plate XXXVIa, No. 3.
64. (T.C. 818. Gen. Reg. 3916), Trench A7' (5) Period IV.
Bull with two legs and one horn broken, has horns bent forward, tail to one side, incised circular eyes, pierced nostrils, incised mouth, pierced string hole through the nose, dotted cross lines over the forehead and sparse lines on the body. Plate XXXVIa, No. 4.
65. (T.C. 332. Gen. Reg. 1786), Trench B1 (6). Period IV.
Forepart of bull, has horns straight up (one broken), incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, horizontal dotted line on the forehead, other lines on the body.
66. (T.C. 454. Gen. Reg. 2439), Trench B1 (7). Period IV.
Forepart of a bull with one leg and one horn broken, has horns straight up, incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, horizontal dotted line across the forehead, and other lines on the body.
67. (T.C. 870. Gen. Reg. 4156), Trench A8' (5) Period IV.
Head of a bull with one horn broken, the other horn bent forward,

- has incised circular eyes pierced nostrils, incised mouth, string hole through the nose, dotted cross lines on the forehead.
68. (T.C. 817. Gen. Reg. 3901), Trench A7' (5). Period IV.
Bull with legs, horns and mouth gone, has tail to one side, cross dotted lines over the forehead.
 69. (T.C. 831. Gen. Reg. 3986), Trench I 11' (6) Period IV.
Forepart of a bull with the mouth, horns damaged, has incised circular eyes, pierced string hole through the nose. Cross dotted lines on the forehead with other lines on the body.
 70. (T.C. 899. Gen. Reg. 4350), Trench A12' (6) Period IV.
Bull with legs, horns, mouth and part of hump broken, has tail to one side, incised circular eyes, cross dotted lines over the forehead, and sparse lines on the body.
 71. (T.C. 843. Gen. Reg. 4017), Trench K9' (6). Period IV.
Bull with hind legs and head missing, has tail to one side and dotted lines on the body.
 72. (T.C. 835. Gen. Reg. 3994), Trench A11' (6) Period IV.
Bull with the legs and head missing, has tail to one side and profuse dotted lines on the body.
 73. (T.C. 902. Gen. Reg. 4354), Trench A10' (5). Period IV.
Bull with three legs, tail, horns and part of mouth broken, has cross dotted lines on the forehead and sparse lines on the body.
 74. (T.C. 892. Gen. Reg. 4303), Trench A10' (5). Period IV.
Headless bull, has tail to one side and profuse line on the body.
 75. (T.C. 867. Gen. Reg. 4137), Trench A8' (4) Period III.
Bull with one leg and one horn broken, has tail falling down between the legs, one horn bent forward, incised circular eyes, pierced nostrils, dotted lines on forehead and profuse lines on the body. Plate XXXVIa, No. 5.
 76. (T.C. 809. Gen. Reg. 3812), Trench A7' (4). Period III.
Bull with two legs and horns broken, has tail to one side, incised diamond shaped eyes, pierced nostrils, incised mouth, string hole through the nose horizontal line across the forehead cut by a perpendicular line from the fore head to the mouth, and profuse lines on the body. Plate XXXVIa, No. 6.
 77. (T.C. 815. Gen. Reg. 3887), Trench I11' (4), Period III.
Forepart of a bull with horns and mouth broken, has incised circular eyes, string hole through the nose, cross dotted lines over the forehead, and profuse lines on the body.

78. (T.C. 888. Gen. Reg. 4284), Trench A12' (4). Period III.
Head of a bull together with hump, mouth and part of the horns broken, the horns bent forward, has incised circular eyes and dotted cross lines over the forehead.
79. (T.C. 816. Gen. Reg. 3888), Trench I11' (4). Period III.
Forepart of a bull with one leg and horns broken, has incised circular nostrils, incised mouth, string hole through the nose, horizontal dotted lines on the forehead and profuse lines on the body.
80. (T.C. 844. Gen. Reg. 4018), Trench A7' (4). Period III.
Forepart of a bull with legs and hump broken, has horns straight up with horizontal dotted lines on the forehead, incised circular eyes, pierced nostrils, incised mouth and string piercing on either side of the mouth and sparse lines on the body.
81. (T.C. 830. Gen. Reg. 3988), Trench A11' (4) Period III.
Head of bull with horns broken, has crossed long lines on the forehead, incised circular eyes, pierced nostrils and incised mouth.
82. (T.C. 794. Gen. Reg. 3688), Trench A6' (5). Period III.
Much damaged bull with legs, mouth and horns gone, has tail to one side, incised circular eyes and two dotted parallel lines between the horns and profuse lines on the body.
83. (T.C. 857. Gen. Reg. 4058), Trench A8' (4). Period III.
Headless bull with sparse lines, tail to one side.
84. (T.C. 249. Gen. Reg. 1267A), Trench A0 (4). Period III.
Headless bull with tail to one side and sparse lines.
85. (T.C. 813. Gen. Reg. 3851), Trench A7' (4). Period III.
Headless bull with sparse lines, traces of red slip.
86. (T.C. 741. Gen. Reg. 3265), Trench A6' (4). Period III.
Headless bull with sparse lines.
87. (T.C. 314. Gen. Reg. 1721), Trench B0 (2). Period II.
Bull with part of legs, hump, horns and mouth broken, has a long tail to one side, horns bent forward, incised circular eyes, cross dotted line on the forehead and other lines on the body.
88. (T.C. 765. Gen. Reg. 3406), Trench A8' (3). Period II.
Bull with the legs, horns, part of hump and mouth broken, has incised circular eyes, dotted cross lines over the forehead, tail falling down and sparse lines on the body.
89. (T.C. 271. Gen. Reg. 1447), Trench B2 (3). Period II.
Forepart of a bull with legs and one horn gone, has another horn

bent forward, applied ears, incised circular eyes, pierced nostrils, incised mouth, string hole through the nose, dotted diamond shaped design on the forehead with two extra incised circuits and other lines on body.

90. (T.C. 733. Gen. Reg. 3231), Trench A6' (3), Period II.
Forepart of a bull with one horn and one side of the mouth broken, has another horn bent forward, incised diamond shaped eyes, pierced nostrils, incised mouth, string hole through the mouth, horizontal lines across the forehead and other lines on the body.
91. (T.C. 661. Gen. Reg. 2847), Trench A10' (1) Period II.
Head of bull with horns bent forward, incised circular eyes, pierced nose, incised mouth, string hole through the nose and a single dotted line between the horns.
92. (T.C. 191. Gen. Reg. 887a), Trench A5 (1) Period II.
Head of a bull with one horn broken, has another horn straight up, incised circular eyes, pierced nose, incised mouth, string hole through the nose, horizontal line across the forehead and other lines on the body.
93. (T.C. 53. Gen. Reg. 152), Trench B0 (1) Period I.
Head of a bull with horns (Partly broken) bent forward, incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, dotted cross lines on the forehead and other lines on the body.
94. (T.C. No. 779. Gen. Reg. No. 3589) A7' (3). Period II.
Head of a bull with horns broken, has incised circular eyes, pierced nostrils, incised mouth, string hole through the nose and a dotted triangle on the forehead with a circle within. Plate XXXIVb, No. 5.
95. (T.C. 823. Gen. Reg. 3946), Trench J11' (3) Period II.
Head of a bull with horns broken, incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, dotted cross lines on the forehead and other lines on the body.
96. (T.C. 761. Gen. Reg. 3368), Trench A8' (3). Period II.
Head of a bull with horns straight up, has dotted cross lines on the forehead, poorly fired.
97. (T.C. 755. Gen. Reg. 3311), Trench A7' (3) Period II.
Bull's head with horns broken, has incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, dotted cross lines on the forehead and other lines on the body.
98. (T.C. 405. Gen. Reg. 2196). Trench C5 (1) Period I.
Forepart of a bull with horns bent forward, string piercing through the mouth, which is damaged, dotted cross lines on the forehead.

99. (T.C. 707. Gen. Reg. 3036), Trench A9' (3) Period II.
Forepart of a bull with legs and horns gone, has incised diamond shaped eyes, pierced nostrils, incised mouth, string hole through the nose, dotted lines tying the horns separately, other lines on the body.
100. (T.C. 358. Gen. Reg. 1984), Trench A4' (3). Period II.
Bull with legs, horns and part of the mouth broken, has tail to one side, incised circular eyes, dotted lines tying horns separately and profuse lines on the body.
101. (T.C. 745. Gen. Reg. 3286), Trench J11' (2) Period II.
Forepart of a bull with legs and horns broken, has incised circular eyes, dotted cross lines on the forehead and other lines on the body.
102. (T.C. 726. Gen. Reg. 3162), Trench A7' (3). Period II.
Bull with legs, horns and mouth broken, has incised circular eyes, dotted triangle on the forehead and other lines on the body.
103. (T.C. 701. Gen. Reg. 3018), Trench A9' (2). Period II.
104. (T.C. 691. Gen. Reg. 2943), Trench A5' (2). Period II.
105. (T.C. 692. Gen. Reg. 2944), Trench A2' (1). Period II.
106. (T.C. 747. Gen. Reg. 3290), Trench JII' (2). Period II.
107. (T.C. 662. Gen. Reg. 2846), Trench A8' (1). Period II.
108. (T.C. 689. Gen. Reg. 2926), Trench A2' (1). Period II.
109. (T.C. 713. Gen. Reg. 3093), Trench A7' (3). Period II.
110. (T.C. 668. Gen. Reg. 2853), Trench A8' (1). Period II.
Headless and legless bodies of bull with dotted lines on the body.
111. (T.C. 729. Gen. Reg. 3189), Trench A9' (3). Period II.
112. (T.C. 727. Gen. Reg. 3183), Trench A8' (3). Period II.
113. (T.C. 702. Gen. Reg. 3015), Trench A5' (2). Period II.
Headless bodies of bulls with lines on the body.
114. (T.C. 718. Gen. Reg. 3136), Trench A9' (3). Period II.
115. (T.C. 705. Gen. Reg. 3022), Trench A9' (3). Period II.
116. (T.C. 672. Gen. Reg. 2864), Trench A2' (1). Period II.
117. (T.C. 714. Gen. Reg. 3103), Trench A7' (3). Period II.
Hind part of bulls having two legs and tail to one side and profuse dotted lines on the body.
118. (T.C. 59. Gen. Reg. 175), Trench B0 (1). Period I.
Headless body of a bull with profuse lines on the body.

- 118 A. (T.C. 674. Gen. Reg. 2868), Trench A6' (1). Period II.

Headless body of a bull with one leg missing having profuse dotted lines on the body.

- 118 B. (T.C. 242. Gen. Reg. 1206), Trench B2 (2). Period II.

Head of a bull having straight up horns, incised circular eyes, pierced nostrils, incised mouth, and dotted cross on the forehead.

VARIETY (ii)

These bull figurines have continuous incised lines around the neck and sometimes on the body also. The eyes are formed variantly.

119. (T.C. 772. Gen. Reg. 3511), Trench A11' (4). Period III.

Forepart of a bull with legs and horns broken, has incised circular eyes, pierced nostrils, incised mouth, string piercing on either side of the mouth, a circle on the forehead and double incised lines around the neck. Plate XXXIVa, No. 3.

120. (T.C. 447. Gen. 1401), Trench D1 (5B) Period III.

Headless body of a bull with traces of incised lines on the body. Red slipped.

121. (T.C. 859. Gen. Reg. 4069), Trench K9' (7) Period V.

Headless body of a bull with incised lines on the back and around the neck, has tail to one side.

122. (T.C. 738. Gen. Reg. 3253), Trench K9' (2) Period II.

Forepart of a bull with prominent hump, horns straight up, has punctured applied eyes and further applique decoration on the forehead, one incised line runs through a hole in the nose and behind the horns, another line around the neck, red slipped. Plate XXXIVa, No. 4.

123. (T.C. 669. Gen. Reg. 2856), Trench A2' (2). Period II.

A small bull with pinched mouth and pierced eyes and incised lines around the mouth and horns.

VARIETY (iii)

These bull figurines have sometimes dotted lines on the body but they all have nail head decoration on the forehead.

124. (T.C. 461. Gen. Reg. 2472), Trench A1 (12). Period V.

Head of a bull with horns broken, has incised circular eyes, string hole through the nose and nail head decoration across and perpendicular to the forehead.

125. (T.C. 897. Gen. Reg. 4348), Trench A12' (6). Period IV.

Bull with legs and part of horns broken, has tail to one side, dotted lines on the body, incised circular eyes, incised mouth, pierced nostrils,

string piercing on either side of the mouth and three nail heads on the forehead.

126. (T.C. 852. Gen. Reg. 4044), Trench A8' (4). Period III.
Forepart of a bull with legs, horns and mouth broken, has dotted lines on the body, incised circular eyes and three nail heads on the forehead.
127. (T.C. 734. Gen. Reg. 3239), Trench I11' (4). Period III.
Head of a bull with horns bent forward, has incised circular eyes, pierced nostrils, incised mouth, string piercing through the mouth, four nail head decorations on the forehead, and a single dotted line on the nose. Plate XXXIVb, No. 3.
128. (T.C. 721. Gen. Reg. 3151), Trench A7' (3). Period. II.
Broken head of a bull with horns bent forward, sigma decoration between the horns.
- 128 A. (T.C. 425. Gen. Reg. 2350), Trench A3 (1). Period II.
Bull with the legs, mouth, horns and hump broken, has dotted triangle on the forehead with three nail head decoration and other lines on the body.
- 128 B. (T.C. 476. Gen. Reg. 2547), Trench F0 (1) Period I.
Bull's head with mouth and one horn broken having circle decoration on forehead, instead of nail head decoration.

VARIETY (iv)

These bull figurines have applique decoration on the head as their distinguishing feature.

129. (T.C. 407. Gen. Reg. 2215), Trench C5 (2). Period II.
Bull's head with horns straight up and incised side ears, has pierced applied eyes, applied decoration between the horns and between the eyes, pierced nostrils, incised mouth, string piercing through the mouth and incised lines. Plate XXXIVb, No. 1.
130. (T.C. 847. Gen. Reg. 4027), Trench K9' (4). Period III.
Bull's head with horns broken, has applied ears and eyes, pierced nostrils, open mouth and string piercing on either side of the mouth.
131. (T.C. 850. Gen. Reg. 4031), Trench A11' (6). Period IV.
Forepart of a bull with one horn broken, has applied decoration going around the broken horns, incised circular eyes, pierced nostrils, incised mouth and string piercing on either side of the mouth.
- 131A. (T.C. 183.a. Gen. Reg. 836), Trench F0 (3). Period I.
Bull's head with horns broken, having a circle design applied on the forehead.

131B. (T.C. 261. Gen. Reg. 1339), Trench A3 (2). Period II.

131C. (T.C. 481. Gen. Reg. 2590), Trench B0 (10). Period IV.

131D. (T.C. 460. Gen. Reg. 2468), Trench A1 (12). Period V.

Bulls with dotted lines on the body.

SECTION - B

HORSES

Horses have been found in all the periods at Shaikhan Dheri. In all they are thirty-one in number. Sir Mortimer (*Charsada* PP. 111-12) has described them individually. Sir John (*Taxila* PP. 455-56) has tried to distinguish the types found in Bhir Mound and Sirkap. We have found no example of horses with hollow body or horses on wheels. All the examples recovered by us have solid bodies and legs. They are fired red and rare examples show red slip. Almost all of them are decorated, the decorations include head-stall, chin-straps, saddles, harness, and horse rider. The majority of the horses have high arched neck. We may classify the horses as follows:

- (i) Those with high arched neck.
- (ii) Those with saddles.
- (iii) Those with horse rider.

TYPE (i)

1. (T.C. 876. Gen. Reg. 4176), Trench K9' (8). Period V.
Fore part of a horse with high arched neck, have incised circular eyes, pierced nose for bridle which is applied, applied breast collar. Plate XXXVIb, No. 1.
2. (T.C. 910. Gen. Reg. 4353), Trench K9' (8). Period V.
Horse with legs broken, body rough, has high arched neck, incised circular eyes, head collar.
3. (T.C. 903. Gen. Reg. 4359), Trench K9' (8). Period V.
Head of a horse having head collar, chin-strap and face strap, incised circular eyes, hole through the nose and other circular decorations. All the decorations are applied. Plate XXXVIb, No. 4.
4. (T.C. 849. Gen. Reg. 4038), Trench A11' (6). Period IV.
Fore part of a horse with face and legs broken, having high arched neck and applied breast band, poorly fired.
5. (T.C. 821. Gen. Reg. 3927), Trench I11' (4). Period III.
Fore part of a horse having high arched neck, head collar, upraised ears, punctured eyes, pierced nostrils, incised mouth, pierced bridle hole on either side of the mouth, bridle and breast band incised with extra dotted lines on the body. Plate XXXVIb, No. 5.

6. (T.C. 731. Gen. Reg. 3215), Trench A4' (5). Period III.
Undecorated horse with high arched neck but head and legs broken.
7. (T.C. 737. Gen. Reg. 3251), Trench A7' (4). Period III.
A crude horse with legs broken, having high arched neck and head collar.
8. (T.C. 288. Gen. Reg. 1575), Trench B1 (5) Period II.
A crude horse similar to No. 7 only one leg preserved.
9. (T.C. 722. Gen. Reg. 3153), Trench A7' (3). Period II.
Head of a horse with pierced eyes, applied bridle, and high arched neck.
10. (T.C. 486. Gen. Reg. 2627), Trench B4 (1). Period I.
Fore part of a horse having high arched neck very crude, pinched face incised eyes and dotted lines on the body.
11. (T.C. 143. Gen. Reg. 529), Trench D0 (4). Period II.
Very crude horse with arched neck.
12. (T.C. 725. Gen. Reg. 3161), Trench A5' (3). Period II.
Fore part of a horse with high arched neck but mouth and legs broken, has incised circular eyes and upraised ears, red slipped.
13. (T.C. 258. Gen. Reg. 1325), Trench B2' (2). Period II.
Head of horse with high neck having incised mane, pierced eyes pierced nostrils, open mouth and incised deep vertical line on the fore head.
14. (T.C. 868. Gen. Reg. 4143), Trench A9' (1) Period II.
Head of a horse with high arched neck having chin and face straps. Plate XXXVIb, No. 6.
15. (T.C. 350. Gen. Reg. 1940), Trench A4' (3). Period II.
Head of a horse with high arched neck pierced nostrils, incised mouth and applied face strap, washed with grey clay.
16. (T.C. 687. Gen. Reg. 2916), Trench A8' (2). Period II.
Head of a horse having incised circular eyes, pierced nostrils, incised mouth, pierced hole through the nose and horizontal dotted lines on the fore-head, with an extra circle decoration. Plate XXXVIb, No. 7
17. (T.C. 368. Gen. Reg. 2032), Trench A2 (3). Period II.
Horse with high arched neck, head collar, incised eyes, incised bridle and face strap and dotted lines on the body. Plate XXXVIc, No. 5
18. (T.C. 482. Gen. Reg. 2591), Trench B2 (3). Period II.
Hind part of a horse with legs broken, has applied body strap. Plate XXXVIb, No. 2

19. (T.C. 743. Gen. Reg. 3281), Trench K10' (2). Period II.
Fore part of a horse with head and legs broken, has applied breast strap.
20. (T.C. 478. Gen. Reg. 2549), Trench F0 (1). Period I.
Head of a horse with applied bridle and face strap, eyes incised.
- 20A. (T.C. 389. Gen. Reg. 2134), Trench B0 (7). Period IV.
Head of a horse with incised circular eyes and three horizontal incised lines on the forehead.
- 20B. (T.C. 719. Gen. Reg. 3148), Trench J7' (1). Period II.
High arched neck of a horse with mouth broken, dotted lines on the neck.
- 20C. (T.C. 305. Gen. Reg. 1651), Trench A2' (3). Period II.
Head of horse with high arched neck, mouth broken.
- 20D. (T.C. 498. Gen. Reg. 2408), Trench D1 (5). Period III.
Horse with legs, neck and mouth broken, has dotted lines on the body.
- 20E. (T.C. 464. Gen. Reg. 2483), Trench B1 (7). Period IV.
Fore part of horse with high arched neck, legs and mouth broken.
- 20F. (T.C. 13. Gen. Reg. 57), Trench E0 (1). Period I.
High arched neck of a horse with incised decoration on the neck.

VARIETY - (ii)

21. (T.C. 894. Gen. Reg. 4342), Trench A12' (6). Period IV.
Horse with legs and head broken, traces of saddle on the back and harness in the form of incised circles on the body with extra dotted lines.
22. (T.C. 782. Gen. Reg. 3598), Trench II1' (5). Period IV.
Horse with head, legs and lower part of body broken, shows saddle by incised lines. Plate XXXVIc, No. 2.
23. (T.C. 351. Gen. Reg. 1956), Trench B1 (5). Period III.
Horse with head and part of legs broken, has saddle on the back and harness shown by double incised lines with extra dotted lines on the body. Plate XXXVIc, No. 4.
24. (T.C. 756. Gen. Reg. 3334), Trench A6' (4). Period III.
Horse with head and legs broken, traces of saddle and applied harness.
25. (T.C. 796. Gen. Reg. 3710), Trench A7' (3). Period II.
A saddled horse with fore part and legs broken. Plate XXXVIc, No. 3.

26. (T.C. 760. Gen. Reg. 3366), Trench K9' (2). Period II.
Horse with legs and part of mouth broken. Traces of saddle and applied bridle.
27. (T.C. 232. Gen. Reg. 1133), Surface.
Forepart of a saddled horse with applied eyes, chin and face strap. Plate XXXVIc, No. 1.

VARIETY - (iii)

28. (T.C. 294. Gen. Reg. 1608), Trench A0 (1). Period II.
Horse with legs broken having a horse rider but broken. Plate XXXVIb, No. 3.
29. (T.C. 238. Gen. Reg. 1180), Trench A2 (2) Period II.
Crudely made horse with legs and tail broken having prominent mane and pinched mouth, traces of a rider on the back. Grey in texture.

SECTION - C ELEPHANTS

Sir Mortimer (*Charsada*, Pl. XXXII-B) has grouped all the elephants illustrated by him on one plate but makes two classes; one of solid elephants and second of hollow elephants. Sir John (*Taxila* PP. 454-55) has added another basis of classification — first of decorated elephants and second of undecorated elephants. His observation that elephant with rider type comes exclusively from the Bhir mound is very significant, if that can be definitely proved. At Shaikhan Dheri there are two examples No. 11 and No. 20 which originally had rider. Here we found only one example No. 2 of hollow elephant. All other specimens are solid. We have also got five examples with holed leg obviously for the attachment of wheels. There is one example No. 1 of crude elephant whose legs are paired together, otherwise the remaining elephants have separate thick, set legs.

Wherever the ears are preserved, they are of broad fan shape. Some of them are saucer-like. The eyes are generally circular but in two cases they are diamond shaped. One example No. 8 has modelled eyes showing clearly the eye lid and the round pupil. In most cases we get the tusks. In all we found seventeen examples of elephants. They are here divided into two broad varieties: (i) undecorated elephants (ii) decorated elephants.

VARIETY - (i)

UNDECORATED ELEPHANTS

1. (T.C. 851. Gen. Reg. 4038), Trench A6' (7). Period V.
Fore-part of a crudely made elephant with solid paired front legs, flat end trunk falling straight down, small applied eyes, and incised line across the fore-head and traces of ears. Red-washed. Plate XXXVIIa, No. 1.

2. (T.C. 778. Gen. Reg. 3588), Trench A11' (4). Period III.
Trunk with spread-out ear on its left side, belonging to a hollow elephant.
3. (T.C. 724. Gen. Reg. 3159), Trench A9' (4). Period III.
Head of an elephant with part of the trunk, fan-shaped ears and small applied eyes.
4. (T.C. 664. Gen. Reg. 2849), Trench A5' (1). Period II.
Head of an elephant with trunk and left ear broken. Another ear saucer-like and applied double circular eyes. Grey in colour. Plate XXXVIIa, No. 3.
5. (T.C. 285. Gen. Reg. 1552), Trench A5' (2). Period II.
Elephant with legs and part of trunk broken, has a small tail, head-collar, incised circular eyes.
6. (T.C. 477. Gen. Reg. 2548), Trench F0 (1) Period I.
Fore-part of an elephant with legs, trunk and one ear broken, the left ear is disc-shaped, and the eyes are incised circles.

VARIETY-(ii)

DECORATED ELEPHANTS

7. (T.C. 856. Gen. Reg. 4054), Trench K9' (7). Period V.
Elephant with trunk and legs broken, has a small tail, head collar, incised circular eyes with pierced pupil, dotted lines on the body, red washed. Plate XXXVIIa, No. 4.
8. (T.C. 853. Gen. Reg. 3046), Trench A11' (7). Period V.
Head of an elephant with trunk and ears broken, has modelled eyes and three incised lines on the trunk. Plate XXXVIIa, No. 5.
9. (T.C. 866. Gen. Reg. 4112), Trench K9' (7). Period V.
Elephant with legs and trunk broken, has a short tail falling down, disc-shaped ears, incised circular eyes with pierced pupil and three circular decoration on the forehead.
10. (T.C. 874. Gen. Reg. 4167), Trench I11' (7). Period V.
Forepart of an elephant with trunk partly broken, has closed ears, pierced eyes and bent trunk with incised dots in a vertical line.
11. (T.C. 840. Gen. Reg. 4013), Trench A11' (5). Period IV.
Hind part of an elephant with holed legs, applied tail and applied rope round the body to hold a saddled rider, traces of which still traceable. Red slipped. Plate XXXVIIa, No. 6.
12. (T.C. 373. Gen. Reg. 2057), Trench B0 (6) Period IV.
Head of an elephant with trunk and one ear broken, another ear fan-

shaped, has diagonal eyes, applied tusks and further applied circles on the forehead with incised lines.

13. (T.C. 825. Gen. Reg. 3958), Trench J11' (3). Period II.
Fore part of an elephant with legs, part of trunk and tusks broken, has applied circular eyes, has disc-shaped ears with circle decoration and more circle decorations in a vertical line on the fore-head and trunk. Plate XXXVIIa, No. 7.
14. (T.C. 708. Gen. Reg. 3042), Trench A4 (3). Period II.
Head of an elephant with ears, tusks and part of trunk broken, has incised circular eyes and a decoration on the fore-head consisting of pierced dots in an inverted shape.
15. (T.C. 421. Gen. Reg. 2328), Trench B5 (3). Period II.
Fore part of an elephant with trunk and legs broken, has punctured applied eyes and dotted lines on the fore-head as well as body.
16. (T.C. 680. Gen. Reg. 2880), Trench A2' (2) Period II.
A holed leg of an elephant with the part of the body showing three incised lines of the saddle and applied rope.
17. (T.C. 686. Gen. Reg. 2915), Trench A2' (1). Period II.
A holed leg of an elephant, having applied rope and stamped decoration. Red slipped Plate XXXVIIa, No. 8.
18. (T.C. 60. Gen. Reg. 176), Trench B0 (1). Period I.
Fore part of an elephant with ears, trunk and legs broken, has vertical incised lines on the forehead and dotted lines on the body.
19. (T.C. 68. Gen. Reg. 187), Trench B1 (2). Period II.
Holed hind leg of an elephant, having a stamped decoration on the leg similar to No. 17.
20. (T.C. 412. Gen. Reg. 2268), Trench B0 (1). Period I.
Hind part of an elephant with only one holed leg preserved, has a rider, partly broken at the back. Plate XXXVIIa, No. 2.

SECTION-D

CAMELS

Sir Mortimer (*Charsada* P. 113) has given only two examples of camels: One dromedary and another two humped camel. Sir John (*Taxila* P. 457) illustrates only one specimen of a toy camel which is of two humped type. At Shaikhani Dheri we found forty eight examples of camels. All of them are solid with stumpy legs, short tail, short slit ears and nose holed for strings. Generally they are two-humped. In a few examples the hump is "in a collapsed position". They are classified under two varieties. Variety (i) undecorated camels and Variety (ii) decorated camels.

VARIETY - (i)

UNDECORATED CAMELS

1. (T.C. 886. Gen. Reg. 4269), Trench K9' (8). Period V.
Head of a camel with incised circular eyes, ears, nose and incised mouth.
2. (T.C. 864. Gen. Reg. 4106), Trench K9' (7). Period V.
Body of a two-humped camel with legs and head broken.
3. (T.C. 800. Gen. Reg. 4022), Trench A11' (6). Period IV.
Head of a camel with diamond eyes, pierced nose and incised mouth.
4. (T.C. 834. Gen. Reg. 3992), Trench A9' (6). Period IV.
Camel with head and two legs broken, has both its humps in a collapsed position. Plate XXXVIIb, No. 1.
5. (T.C. 833. Gen. Reg. 3991), Trench A8' (4). Period III.
Two-humped camel with head and legs broken, has a short applied tail. Red slipped.
6. (T.C. 845. Gen. Reg. 4019), Trench A7' (4), Period III.
Camel's head with neck having preserved only one hump with incised circular eyes. Red washed.
7. (T.C. 703. Gen. Reg. 3011), Trench A8' (3). Period II.
Camel with head, legs and tail broken, having two humps in a collapsed position.
8. (T.C. 196. A. Gen. Reg. 929), Trench B4 (1). Period I.
Camel with head and legs broken, has a short tail and two humps in a collapsed position. Plate XXXVIIb, No. 3.
9. (T.C. 457. Gen. Reg. 2449), Trench B5 (2). Period II.
Camel with head and legs broken, has a short tail and two humps.
10. (T.C. 780. Gen. Reg. 3590), Trench A7' (3). Period II.
Head of a camel with pierced nostrils, incised mouth, nose pierced for string and eyes incised.
11. (T.C. 664. Gen. Reg. 2848), Trench A10' (1). Period II.
Head of a camel with pierced nostrils, open mouth, pierced nose for string and pierced eyes.

VARIETY - (ii)

DECORATED CAMELS

The decorations are given variantly. Very often we have dotted lines on the body or on the forehead. Sometimes we find a series of deeply incised lines and sometimes we have circular decoration on the fore-head.

12. (T.C. 861. Gen. Reg. 4087), Trench K9' (7). Period V.
Head of a camel with applied eyes, pierced nostrils, incised mouth, circles on the forehead and a tuft of hair behind the head. Plate. XXXVIIb, No. 4.
13. (T.C. 479. Gen. Reg. 2566), Trench B0 (10). Period V.
Head of a camel with incised circular eyes, pierced nostrils, incised mouth, holed nose, dotted lines on the neck.
14. (T.C. 890. Gen. Reg. 4294), Trench K9' (8). Period V.
Head of a camel with incised circular eyes, pierced nostrils, incised mouth, holed nose, and circular decoration on the fore-head.
15. (T.C. 900. Gen. Reg. 4352), Trench A10' (11). Period V.
Head of a camel similar to No. 14, but has traces of two straps on the face.
16. (T.C. 459. Gen. Reg. 2455), Trench B5 (7). Period IV.
Head of a camel with diamond shaped eyes, pierced nostrils, holed nose, incised mouth, pierced ears, and dotted line on the forehead and neck. Plate XXXVIIb, No. 8.
17. (T.C. 771. Gen. Reg. 3494), Trench A9' (6). Period IV.
Two-humped camel, with front hump tilted, has its head and legs broken, and series of deep incised lines on the body. Plate XXXVIIb, No. 5.
18. (T.C. 820. Gen. Reg. 3922), Trench A7' (5). Period IV.
Head of a camel with incised circular eyes, pierced nostril, incised mouth, nose holed for string, incised ears, and deep incised vertical lines on the neck.
19. (T.C. 746. Gen. Reg. 3289), Trench A10' (5). Period IV.
Head of camel with face completely gone, dotted lines on the neck.
20. (T.C. 793. Gen. Reg. 3674), Trench A4' (6). Period IV.
Hind part of a two-humped camel, with one leg and hump broken, dotted lines on the body.
21. (T.C. 792. Gen. Reg. 3672), Trench A2' (5). Period IV.
Head of a camel with dotted lines on the neck.
22. (T.C. 742. Gen. Reg. 3268), Trench A2' (5). Period IV.
Hind part of a camel with one leg missing, dotted lines on the body, red washed.
23. (T.C. 776. Gen. Reg. 3578), Trench A4' (5). Period IV.
Two-humped camel, with one hump, two legs and head missing, has short tail and dotted lines on the body.

24. (T.C. 730. Gen. Reg. 3195), Trench A4' (5). Period IV.
Head of a camel with incised circular eyes, incised mouth, nose holed for string and dotted lines on the forehead and neck.
25. (T.C. 754. Gen. Reg. 3307), Trench A6' (4). Period III.
Head of a camel with incised circular eyes, pierced nose, incised mouth, nose holed for string, incised ears and dotted lines on the neck and fore-head.
26. (T.C. 764. Gen. Reg. 3394), Trench A5' (4). Period III.
Head of camel with incised circular eyes, pierced nostrils, incised mouth, nose holed for the string and dotted horizontal lines on the forehead.
27. (T.C. 777. Gen. Reg. 3583b), Trench A8' (4). Period III.
Two-humped camel with head and legs broken, dotted lines on the body.
28. (T.C. 783. Gen. Reg. 3600), Trench A8' (4). Period III.
Fore-part of a camel with head and legs missing, has preserved one hump and dotted lines on the body.
29. (T.C. 499. Gen. Reg. 2691), Trench B3 (2). Period II.
Head of a camel with incised circular eyes, pierced nostrils, incised mouth, nose holed for string, has short ears and dotted lines on the head.
30. (T.C. 735. Gen. Reg. 3244), Trench A9' (3) Period II.
Two-humped camel with head and legs broken, dotted lines on the body.
31. (T.C. 660. Gen. Reg. 2839), Trench A2' (1) Period II.
Forepart of a camel with face and legs broken, dotted lines on the neck.
32. (T.C. 795. Gen. Reg. 3701), Trench I11' (3). Period II.
Two-humped camel with head and legs broken.
33. (T.C. 803. Gen. Reg. 3769), Trench A3' (5). Period IV.
Two-humped camel with head and legs broken, dotted lines on the body.
34. (T.C. 323. Gen. Reg. 3155), Trench I11' (3). Period II.
Head of a camel with mouth and ears broken, incised circular eyes, tuft of hair on the back of head, and deep lines on the fore-head and neck.
35. (T.C. 145. Gen. Reg. 540), Trench A0 (1). Period II.
Head of a camel with incised circular eyes, pierced nostrils, incised mouth, holed nose for string, tuft of hair on the back of head with

circular decoration on the forehead and nail head decoration on the head.

36. (T.C. 806. Gen. Reg. 3795), Trench A8' (3). Period II.
Head of a camel with incised circular eyes, pierced nostrils, incised mouth, holed nose for string, tuft of hair on the back of head and nail head decoration on the forehead. Period XXXVIIb, No. 7
37. (T.C. 784. Gen. Reg. 3602), Trench A7' (3). Period II.
Two-humped camel with one hump, legs and tail broken, incised circular eyes, pierced nostrils incised mouth, holed nose for string, dotted line on the neck and body. Plate XXXVIIb, No. 6
38. (T.C. 768. Gen. Reg. 3448), Trench A7' (3). Period II.
Body of a two-humped camel with head and one leg broken, dotted line on the body. Plate XXXVIIb, No. 2
39. (T.C. 667. Gen. Reg. 2852), Trench A8' (1). Period II.
40. (T.C. 767. Gen. Reg. 3417), Trench A7' (3). Period II.
41. (T.C. 492. Gen. Reg. 2661), Trench B3/C3 (2). Period II.
42. (T.C. 66. Gen. Reg. 185), Trench B1 (2). Period II.
43. (T.C. 321. Gen. Reg. 1123), Trench B5 (1). Period I.
44. (T.C. 453. Gen. Reg. 2431), A0 (7). Period IV.
All camel heads with dotted lines.
45. (T.C. 2431. Gen. Reg. 2431), Trench A0 (7). Period IV.
46. (T.C. 466. Gen. Reg. 2501), Trench D1 (9). Period IV.
47. (T.C. 277. Gen. Reg. 1489), Trench A0 (3). Period II.
48. (T.C. 500. Gen. Reg. 2698), Trench X0 (5). Period IV.
All camel parts with dotted lines on body.

SECTION-B

MONKEYS

Sir John (*Taxila* P. 458) found toy monkeys only in Sirkap, which rest against their back tail. Sir Mortimer (*Charsada* P. 111) found them in the middle and late layers of his excavation. At Shaikhan Dheri they are found at all levels. The largest number belongs to the type found at Sirkap. This type resembles a class of human figurines (type IX Nos. 180, 192, 193, 194, 196, 197, 198, 200a). There are also other varieties but few in number. A separate variety has been made of those monkeys whose only heads are preserved. Again these monkeys are in various postures and actions. Some of them are simple but the majority are decorated. They are classified as under:

- VARIETY (i) Monkeys with back rest.
- VARIETY (ii) Monkeys on fours.

- VARIETY (iii) Monkeys with a hole at the bottom.
 VARIETY (iv) Monkeys with upraised tail.
 VARIETY (v) Monkey lid.
 VARIETY (vi) Monkey heads.

VARIETY (i)

MONKEYS WITH BACK REST

All these monkeys are resting on their tail and two legs, which serve as a tripod. They all have the other two hands in one or another action and their face gives the impression of a mimic. They have round incised eyes with pierced pupils, pierced nostrils and lined mouth. They are all burnt/red.

1. (T.C. 873. Gen. Reg. 4166), Trench I11' (7). Period V.
 Monkey with head, legs, one arm and back-rest broken, the right arm on the chest incised lines on the waist.
2. (T.C. 875. Gen. Reg. 4171), Trench I 11' (7). Period V.
 Monkey with head, legs and back rest broken, has right hand with incised fingers behind the back, and left hand on the thigh, incised circles on the chest and at the testicles and a deep line suggesting female organ, and circle decoration at the back.
3. (T.C. 458. Gen. Reg. 2454), Trench A0 (8). Period IV.
 Monkey with hands and left leg broken, dotted lines on the body.
4. (T.C. 462. Gen. Reg. 2473), Trench A1 (14). Period V.
 Monkey with hands, head and right leg broken, dotted lines on the body.
5. (T.C. 872. Gen. Reg. 4164), Trench K9' (8). Period V.
 Monkey with the right hand and leg missing, the left hand with incised fingers resting on the left thigh, applied ears, applied necklace, pierced breasts and incised line across the front. Plate XXXVIII, No. 1.
6. (T.C. 898. Gen. Reg. 4349), Trench A10' (8). Period V.
 Monkey with broken hands and legs, incised vertical line on the chest.
7. (T.C. 826. Gen. Reg. 3963), Trench A9' (6). Period IV.
 Monkey with hands and right leg broken, dotted lines on the body.
8. (T.C. 773. Gen. Reg. 3527), Trench A4' (6). Period IV.
 Monkey with left leg missing, the right hand with incised fingers resting on cheek, the left hand on the hip, dotted lines on the body. Plate XXXVIII, No. 2.
9. (T.C. 882. Gen. Reg. 4248), Trench A8' (6). Period IV.
 Monkey with hands and legs broken, no decoration

10. (T.C. 307. Gen. Reg. 1671), Trench E1 (6). Period IV.
Monkey with left hand broken, right hand on the chest, dotted lines on the body.
11. (T.C. 895. Gen. Reg. 4344), Trench A12' (6). Period IV.
Monkey with left leg broken, right hand holding probably the broken left hand. Plate XXXVIII, No. 3.
12. (T.C. 819. Gen. Reg. 3902), Trench A7 (5). Period IV.
Monkey with conical cap with dotted lines. Hands with incised fingers resting on thigh, deep incisions forming a cross on the body. Plate XXXVIII, No. 4.
13. (T.C. 456. Gen. Reg. 2448), Trench B5 (6). Period IV.
Monkey with hands, head and left leg broken. No decoration.
14. (T.C. 879. Gen. Reg. 4217), Trench A8 (6). Period IV.
Monkey with applied ears and eyes, both hands holding male organ, deep incisions on body. Plate XXXVIII, No. 5.
15. (T.C. 744. Gen. Reg. 3280), Trench A2' (5). Period IV.
Monkey with head, hands and leg broken, dotted lines on the body.
16. (T.C. 828. Gen. Reg. 3978), Trench A9' (6). Period IV.
Monkey with left hand and legs broken, right hand with incised fingers resting on thigh, dotted lines on the body, applied tuft of hair on the back of head.
17. (T.C. 826. Gen. Reg. 3959), Trench I 11' (5). Period IV.
Monkey with legs broken, hands clasped on the chest, dotted lines on the body and head. Plate XXXVIII, No. 6.
18. (T.C. 871. Gen. Reg. 4162), Trench A8' (4) Period III.
Monkey with the right leg broken, deep lines on the body, hands with incised fingers making *chapati*. Plate XXXVIII, No. 7.
19. (T.C. 790. Gen. Reg. 3669), Trench A2' (5). Period III.
Monkey with the right hand and legs broken, left hand at the hip and dotted lines on the body.
20. (T.C. 799. Gen. Reg. 3725), Trench A8' (4). Period III.
Lower part of a monkey with dotted lines on the body.
21. (T.C. 759. Gen. Reg. 3355), Trench A9' (4). Period III.
Monkey with hands and legs broken, applied ears and upraised male organ.
22. (T.C. 667. Gen. Reg. 2950), Trench A10' (3). Period II.
Monkey with legs, right hand and head broken, left hand on thigh, dotted lines on body.

23. (T.C. 757. Gen. Reg. 3294), Trench J11' (2). Period II.
Monkey without head, right leg broken, right hand on breast, left hand on thigh, applied breasts. Plate XXXVIII. No. 8
24. (T.C. 676. Gen. Reg. 2876), Trench A2' (1) Period II.
Monkey with hands and right leg broken, dotted lines on the body.
25. (T.C. 775. Gen. Reg. 3560), Trench A7' (2). Period II.
Monkey with the right hand broken, left hand on the male organ, dotted lines on the body.
26. (T.C. 175. Gen. Reg. 736), Trench C0 (2). Period I.
Monkey with head and legs broken, both hands on the male organ.
27. (T.C. 785. Gen. Reg. 3616), Trench J11' (2). Period II.
Monkey with hands and legs broken, deep vertical incision on chest and head.
28. (T.C. 798. Gen. Reg. 3734), Trench J11' (1). Period II.
Monkey with right leg broken, holding apparently baby with hands, dotted lines on the body. Plate XXXVIII. No. 9
29. (T.C. 837. Gen. Reg. 4009), Trench A8'-A9' (2). Period II.
Monkey with the right hand broken, left hand on thigh, head turned to left. Plate XXXVIII. No. 10
30. (T.C. 402. Gen. Reg. 2190), Trench A0 (2). Period II.
Monkey without head, right hand and left leg broken, holding a baby with left hand, dotted lines on the body. Plate XXXVIII. No. 11
- 30a. (T.C. 487. Gen. Reg. 2629), Trench B4 (2). Period II.
A headless monkey with highly decorated body, with dotted lines and circles in the form of cross-band (*Chhannavira*), waist band and chest band.
- 30b. (T.C. 397. Gen. Reg. 2140), Trench C0 (2). Period I.
Headless monkey with hands clasped to the front.
- 30c. (T.C. 70. Gen. Reg. 188), Trench B0 (2). Period II.
Monkey with head, hands and legs missing, has a dimple at the navel.
- 30d. (T.C. 418. Gen. Reg. 2289), Trench B4 (3). Period II.
Monkey with legs and hands broken, made in two parts, head and body made separately and later joined at the neck, which has a neck band with dotted lines. It has its face pinched, nose pierced, eyes incised, four dotted lines on the forehead and dotted cross band on the chest.
- 30e. (T.C. 494. Gen. Reg. 2671), Trench D1 (14). Period V.
Lower part of a monkey with back rest.

VARIETY (ii)

MONKEY ON FOURS

These monkeys are standing on four legs with the tail either turned up or falling down looking in front. The face has applied eyes and the body is plain.

31. (T.C. 884. Gen. Reg. 4259), Trench K9' (8). Period V.
Monkey with applied ears and circle decoration on the head, tail turned up, both the legs and right hand broken and a hole at the back. Plate XXXVIII, No. 12
32. (T.C. 863. Gen. Reg. 4105), Trench K9' (8), Period V.
Monkey with legs and head broken, applied ears and eyes incised, tail falling behind.
33. (T.C. 58. Gen. Reg. 172), Trench EO (1) Period I,
Upper part of monkey with a circle decoration on head and applied ears.
34. (T.C. 389. Gen. Reg. 4290) Trench K9' (8), Period V,
Monkey with the right hand and tail broken, a hole at the back.
- 34a. (T.C. 891. Gen. Reg. 4299), Trench K9' (8). Period V.
Upper part of a monkey with hands broken, having applied eyes and mouth.

VARIETY (iii)

MONKEY WITH A HOLE AT THE BOTTOM

35. (T.C. 700. Gen. Reg. 3004), Trench A3' (1). Period II.
Monkey with left arm and left leg broken, the right arm extended and the right leg on the left thigh, face pinched, hole at the bottom.
36. (T.C. 299. Gen. Reg. 1616), Surface Collection.
Female monkey with head broken, has a back rest, applied breasts and necklace incised with nail heads, both the hands above the female organ, which is clearly marked by incision. Plate XXXVIII, No. 13

VARIETY (iv)

MONKEY WITH UP-RAISED TAIL

37. (T.C. 887. Gen. Reg. 4271), Trench A8' (7). Period V.
Monkey with broken head, seated on extended legs to the front, hands on the thigh. Plate XXXVIII, No. 14

VARIETY (v)
MONKEY LID

38. (T.C. 693. Gen. Reg. 2954), Trench A9' (1). Period II.
Monkey lug with face pinched. Plate XXXVIII, No. 15
- 38a. (T.C. 99, Gen. Reg. 285), Trench E0 (2). Period I.
A monkey lug having applied ears, tuft of hair and eye sockets.

VARIETY (vi)
MONKEY HEADS

39. (T.C. 252. Gen. Reg. 1278), Trench B5 (2). Period II.
40. (T.C. 862. Gen. Reg. 4099), Trench A9' (9). Period V.
41. (T.C. 160, Gen. Reg. 621), Trench A1 (3). Period II.
42. (T.C. 678. Gen. Reg. 2878), Trench A2' (1). Period II.
43. (T.C. 812. Gen. Reg. 3786), Trench A4' (5). Period III.
44. (T.C. 193. Gen. Reg. 904), Trench C0 (2). Period I.
45. (T.C. 182. Gen. Reg. 834), Trench A0 (3). Period II.
46. (T.C. 800, Gen. Reg. 3738), Trench J11' (1). Period II.
47. (T.C. 808, Gen. Reg. 3811), Trench A9' (4). Period III.
48. (T.C. 712. Gen. Reg. 3099), Trench A4' (4). Period III.
49. (T.C. 237. Gen. Reg. 1153), Trench A4 (1). Period II.
- All heads.

SECTION - F
DOGS

Sir John (*Taxila* P. 457) has illustrated only one doubtful example of a dog found at Hathial. Sir Mortimer (*Charsada* P. 113) has illustrated four examples of dogs. In our excavation we found nine examples. They are classified here under two varieties: variety (i) undecorated dogs and variety (ii) decorated dogs.

VARIETY (i)
UNDECORATED DOGS

1. (T.C. 770. Gen. Reg. 3490), Trench K7' (2). Period II.
Dog in running pose but legs and ears broken, with tail turned up having incised circular eyes, pierced nose and incised mouth. Similar to *Charsada*, Pl. XXXIIA.
2. (T.C. 803. Gen. Reg. 3750), Trench I11' (3). Period II.
Dog standing on fours with legs, ears and mouth partly broken, has

tail falling down, vacant sockets for the eyes. Very rough and crude.

3. (T.C. 754. Gen. Reg. 3299), Trench J11' (2). Period II.
A running puppy with short tail up and face not properly defined, one leg broken. Plate XXXIX. No. 3.
4. (T.C. 869. Gen. Reg. 4155), Trench K9' (8). Period V.
A small puppy with legs partly broken, having incised ears and mouth, grey in texture.
5. (T.C. 878. Gen. Reg. 4208), Trench A8' (6). Period IV.
Crudely made dog with three legs, tail and part of the mouth broken, has a head collar.
6. (T.C. 222. Gen. Reg. 1047), Trench C1 (3). Period II.
Forepart of a bull dog with legs, part of mouth and ears broken, has oval eyes, red slipped.

VARIETY (ii)

DECORATED DOGS

7. (T.C. 791. Gen. Reg. 3685), Trench A7' (3). Period II.
Bull dog with legs and mouth broken, has applied tail falling down to one side, hanging ears, incised circular eyes, dotted lines on the forehead and neck band shown by dotted lines. Plate XXXIX, No. 4.
8. (T.C. 769. Gen. Reg. 3460), Trench A3' (4). Period III.
Bull terrier with legs, tail, mouth and one ear broken, has oval sockets for the eyes, spread out ear and dotted lines on the body and legs, red slipped. Plate XXXIX. No. 6.
9. (T.C. 787. Gen. Reg. 3640), Trench K11' (3). Period II.
Bull dog with the legs, tail, ears and mouth partly broken, has applied circular eyes and nail head decoration on the forehead.

SECTION - G

RAMS AND GOATS

Sir Mortimer (*Charsada* P. 113) has given examples of ram's head-lugs from pots. From our excavation we found eighteen examples of rams but none can be definitely said to be a lug from pot. Sir John (*Taxila*, P. 457) speaks of solid and hollow specimens of toy rams. But our examples are all solid. In those cases which are fully preserved, the rams are standing on four-legs. Some of them are again decorated and some of them are undecorated. They have their horns invariably turned in and in most cases the horns are further decorated with vertical lines. Some of them have holes through the nose for strings. The eyes are generally incised and circular but in a few cases they are applied and in few others they are oval. There are only two examples

of goats which have longish mouth and short horns.

1. (T.C. 677. Gen. Reg. 2877), Trench A2' (2) Period II.
Forepart of a ram with incised circular eyes, incised mouth, pierced nostrils hole through the nose and dotted cross on the forehead.
2. (T.C. 838. Gen. Reg. 4010), Trench A11' (5). Period IV.
Head of a ram with incised circular eyes, incised mouth, traces of hole through the nose.
3. (T.C. 884. Gen. Reg. 4255), Trench A10' (8). Period V.
Ram's head with incised circular eyes, incised nostrils, incised mouth, incised circle on the forehead, horns having vertical lines.
4. (T.C. 446. Gen. Reg. 2401), Trench D1 (5B). Period III.
Forepart of ram with legs, left horn and mouth broken, incised circular eyes, dotted lines on the forehead.
5. (T.C. 728. Gen. Reg. 3186), Trench, A8' (3). Period II.
Ram's head with horns and mouth broken, incised circular eyes and incised lines on the forehead.
6. (T.C. 740. Gen. Reg. 3264), Trench A2' (5). Period III.
Ram's head with left horn broken, incised circular eyes, incised mouth, holed nose, dotted lines on the forehead.
7. (T.C. 858. Gen. Reg. 4066), Trench A9' (7). Period V.
Ram's head with left horn and mouth broken, incised circular pierced eyes and incised pierced circle on the forehead.
8. (T.C. 736. Gen. Reg. 3245), Trench A9' (4). Period III.
Ram's body with fore legs broken, incised diamond eyes and incised circle decoration on forehead and body.
9. (T.C. 801. Gen. Reg. 3739), Trench J11' (1). Period II.
Ram's head with horn partly broken, applied eyes.
10. (T.C. 805. Gen. Reg. 3780), Trench A8' (3). Period II.
Fore part of ram with legs broken, incised circular eyes, incised mouth, pierced nostrils and incised lines on the head.
11. (T.C. 774. Gen. Reg. 3548), Trench A7' (2). Period II.
Ram with legs partly broken, has long nozzle shaped mouth, incised diamond eyes, pierced nostrils and short twisted horns.
12. (T.C. 22. Gen. Reg. 88), Trench B1 (2). Period II.
Forepart of ram with legs, horns and mouth broken, has oval eyes and vertical lines on the forehead and horns.
13. (T.C. 435. Gen. Reg. 63), Trench C1 (2). Period I.
Ram's head with incised circular eyes, pierced nostrils and dotted

cross on the forehead and dotted lines on the head.

14. (T.C. 829. Gen. Reg. 3987), Trench J9' (4). Period III.
Ram's head with left horn broken, incised oval shaped eyes, incised mouth, pierced nostrils, holed nose, incised vertical line on the forehead and chin strap shown by incised lines, dotted lines on the horn.
15. (T.C. 344. Gen. Reg. 1895), Trench C5 (1). Period I.
Head of ram with stamped circular eyes, pierced nostrils, incised mouth, hole through the nose, applied decoration on the forehead and incised vertical lines on the horns.
16. (T.C. 434. Gen. Reg. 2377), Trench A5 (6). Period IV.
Fore part of a ram with part of legs and mouth broken, has stamped circular eyes, dotted cross lines on the forehead, other lines on the body and vertical lines on the horns.
17. (T.C. 673. Gen. Reg. 2867), Trench A8' (1). Period II.
Goat's head with eyes and mouth shown by incised lines, pierced nostrils and string piercing from either side of the nose.
18. (T.C. 57. Gen. Reg. 162), Trench B1 (2). Period II.
Goat's head with ears broken, has diamond shaped eyes and nose pierced. Plate. XXXIX, No. 10.

SECTION - II

MISCELLANEOUS ANIMALS

In this section we describe other animals found in small number. They are all hand made. Some of them are decorated while others are undecorated. Most of them are toys, but some serve useful purpose like the lion-faced gargoye (No. 8).

1. (T.C. 739. Gen. Reg. 3256), Trench K9' (4). Period III.
Hind part of a tiger with one leg broken, has long tail applied to one side and dotted lines on the body.
2. (T.C. 824. Gen. Reg. 3952), Trench I11' (5). Period IV.
Tiger similar to (No. 1) but tail turned to one side. Plate XXXIX, No. 9.
3. (T.C. 695. Gen. Reg. 2970), Trench A4' (2). Period II.
Hind part of a tiger with one leg broken, tail missing, deep incisions on the body. Plate XXXIX, No. 2.
4. (T.C. 472. Gen. Reg. 2541), Trench A1 (17). Period VI.
Hind part of a tiger with legs broken, tail to one side.
5. (T.C. 763. Gen. Reg. 3377), Trench J11' (2). Period II.

- Tiger with head and two legs broken, has tail to one side and dotted lines on the body.
6. (T.C. 285. Gen. Reg. 1552), Trench B0 (2). Period II.
Tiger with legs, tail and mouth broken, has dotted lines on the forehead and body.
 7. (T.C. 705. Gen. Reg. 3021), Trench A7' (3). Period II.
Forepart of a tiger with one leg broken, has incised eyes, dotted lines on the forehead and body.
 8. (T.C. 84. Gen. Reg. 233), Trench A1 (2). Period II.
Part of a gargoyle showing the lion face with pierced nose and modelled eyes. Plate XL. No. 8.
 9. (T.C. 915. Gen. Reg. 4042), Trench I 9' (2). Period II.
Head of a cobra with tip broken, hole through the body. Plate XXXIX, No. 7.
 10. (T.C. 848. Gen. Reg. 4029), Trench A11' (6). Period IV.
Forepart of a snake with circular eyes and nail head decoration on the body.
 11. (T.C. 681. Gen. Reg. 2896), Trench A6' (2). Period II.
Part of crocodile with pierced nose and pierced eyes and incised applied ears.
 12. (T.C. 814. Gen. Reg. 3872), Trench J8' (3). Period II.
Cat on fours with legs, mouth and part of ears broken, has dotted and circle decoration on the forehead and body.
 13. (T.C. 529. Gen. Reg. 2851), Trench A6' (1). Period II.
Head of a cat with incised circular eyes, dotted lines on the forehead.
 14. (T.C. 690. Gen. Reg. 2929), Trench A7' (1). Period II.
A small fat rat with pierced eyes and pierced hole at the back, body partly damaged. Plate XXXIX, No. 5.
 15. (T.C. 671. Gen. Reg. 2862), Trench A2' (2). Period II.
Front view of pig with long nozzle, but one leg and tail broken. Plate XXXIX, No. 1.
 16. (T.C. 710. Gen. Reg. 3080), Trench A8' (3). Period II.
Pig with the legs broken, has long nozzle and applied tail.

SECTION - I

BIRDS

Terracotta birds have been found in all the levels of our excavation. They are all burnt red, some of them have incised lines showing feathers and

incised circles showing other decorations, while others are undecorated. The largest number is of bird-chariots (See *Charsada* P. 114. Pl. XXXV). The other examples are either heads or hollow birds probably used as bird whistles. Thus we have two main varieties:

Variety (i) Bird Chariots.

Variety (ii) Miscellaneous birds.

VARIETY (i) BIRD CHARIOTS

1. (T.C. 510. Gen. Reg. 2769), Trench B1 (16). Period VI.
Bird chariot with head, has hole through the body, feathers shown by incision, hole through the nose, incised circular eyes. Plate XL, No. 1.
2. (T.C. 913. Gen. Reg. 4032), Trench A9' (7). Period V.
Bird chariot with a hole through the body, feathers shown by cross incised lines towards the tail end and small circular decorations on the upper half, nose hole, incised mouth, tiny incised eyes and deep lines on the crest. Plate XL, No. 5.
3. (T.C. 919. Gen. Reg. 4168), Trench K9' (7). Period V.
Bird chariot with beak slightly broken, has a crest on the head, incised circular eyes and a hole through the body, undecorated. Plate XL, No. 9.
4. (T.C. 911. Gen. Reg. 3995), Trench A9' (6). Period IV.
Bird chariot with head, has a hole through the body and circle decorations on the upper part of the body and fore-head, applied eyes and nose hole. Plate XL, No. 2.
5. (T.C. 78. Gen. Reg. 213), Trench B1 (2). Period II.
Bird chariot with hole through the body, feathers shown by incised lines, has nail head decoration on the forehead and incised circular eyes. Plate XL, No. 6.
6. (T.C. 910. Gen. Reg. 3649), Trench A8' (3). Period II.
Bird chariot with head broken, has a hole through body and the wings shown by incised lines, while a row of circles in the middle of the body. Plate XL, No. 10.
7. (T.C. 922. Gen. Reg. 4273), Trench A8' (8). Period V.
Tail end of a bird chariot with a hole through the body, tail having incised lines. Plate XL, No. 3.
8. (T.C. 501. Gen. Reg. 2708), Trench D1 (16). Period VI.
Undecorated bird chariot with head and tail broken, has a hole through the body.

9. (T.C. 917. Gen. Reg. 4113), Trench K9' (7). Period V.
Tail end of a bird chariot with a hole through the body, undecorated.
10. (T.C. 918. Gen. Reg. 4163), Trench K9' (8). Period V.
Bird chariot with head broken, hole through the body, undecorated.
11. (T.C. 934. Gen. Reg. 4311), Trench A8' (8). Period V.
Bird chariot with head missing, feathers shown by incised lines.
12. (T.C. 471. Gen. Reg. 2540), Trench A1 (16). Period VI.
Bird chariot with head broken, feathers shown by cross hatchings, red slipped, has a hole through the body.
13. (T.C. 921, Gen. Reg. 4207), Trench A10' (8). Period V.
Bird chariot with head and tail missing, has a hole, undecorated.
14. (T.C. 916. Gen. Reg. 4008), Trench A11' (7). Period V.
Bird chariot with head and tail broken, has a hole through the body, wing shown by incised lines.
15. (T.C. 920. Gen. Reg. 4170), Trench A11' (9). Period V.
Undecorated bird chariot, with head and tail broken, hole through the body.
16. (T.C. 908. Gen. Reg. 3254), Trench A2' (5). Period III.
Bird chariot with head broken, hole through the body and dotted lines across the body.
17. (T.C. 26. Gen. Reg. 97), Trench B0 (2). Period II.
Bird chariot with head and tail broken, has hole through the body, feathers shown by nail heads.
18. (T.C. 912. Gen. Reg. 4015), Trench A9' (6). Period IV.
Bird chariot with head broken, has a hole through the body, wings shown by incised lines and nail head row in the middle of the body.
19. (T.C. 923. Gen. Reg. 4278), Trench K9' (8). Period V.
Bird chariot with head and tail broken, has a hole through the body, dotted lines across the body.
20. (T.C. 907. Gen. Reg. 3198), Trench A8' (3). Period II.
Upper part of a bird chariot with beak broken, undecorated.
21. (T.C. 904. Gen. Reg. 2899), Trench A4' (2). Period II.
Undecorated bird chariot with head and tail broken, has a hole through the body.
22. (T.C. 262. Gen. Reg. 1340), Trench A3' (1). Period II.
Bird chariot with head broken, has a hole through the body and wings shown by incised lines.

23. (T.C. 906. Gen. Reg. 2988), Trench A3' (1). Period II.
Bird chariot with head and tail broken, has a hole through the body, wings shown by incised lines.

VARIETY (ii)

MISCELLANEOUS BIRDS

24. (T.C. 512a. Gen. Reg. 2225), Trench C5 (2). Period II.
Hud hud bird standing on three legs, hollow inside, with a hole at the tail, probably to be used as whistle, wings applied separately and then cross hatched, eyes applied separately. Plate XL, No. 7.
25. (T.C. 909. Gen. Reg. 3432), Trench J11' (2). Period II.
Upper part of a cock with hollow body undecorated. Plate XL, No. 11.
26. (T.C. 67. Gen. Reg. 186), Trench E1 (1). Period I.
Head of a wood-pecker which originally had hollow body, crest broken, has incised circular eyes and beak incised. Plate XL, No. 4.
27. (T.C. 504. Gen. Reg. 2720), Trench D1 (17). Period VI.
A small solid hen with head, legs and tail broken, undecorated.
28. (T.C. 361. Gen. Reg. 1992), Trench A0' (5). Period III.
Part of a hawk? standing on legs now broken wings shown by incised lines, has incised circular eyes and incised beak. Plate XL, No. 8.
29. (T.C. 480. Gen. Reg. 2575), Trench C1 (4). Period II.
Lug in the form of bird of a broken pot. Plate XL, No. 12.
30. (T.C. 507. Gen. Reg. 2727), Trench D4 (1). Period I.
A long tailed bird with breasts, head, legs and wings broken.

SECTION - J

WHEELS (Plate XL1b)

Sir John (*Taxila* P. 452) has illustrated three specimens: two from Bhir Mound and one from Sirkap. Sir Mortimer (*Charsadu* P. 114) has illustrated two examples. From our excavation we found a large number of wheels at all levels.

They are classified here under six Varieties.

- Variety (i) Cogged wheels having hub on one side the other side being flat, No. 9.
- Variety (ii) Smooth tyred wheels having hub on one side the other side being flat, No. 3.
- Variety (iii) Spoked wheels with hub on one side, No. 8.
- Variety (iv) Collared wheels. They are small in size, No. 4.
- Variety (v) Thick solid wheels without hub or collar, No. 7.
- Variety (vi) Thin solid wheels without hub or collar, No. 5.

VARIETY (i)
COGGED WHEELS

1. (T.C. No. 33. Gen. Reg. No. 4325) Trench A11' (5) Period IV.
2. (T.C. No. 24. Gen. Reg. No. 4138) Trench A8' (4) Period III.
3. (T.C. No. 13. Gen. Reg. No. 3830) Trench K11' (3) Period II.
4. (T.C. No. 12. Gen. Reg. No. 3796) Trench A8' (3) Period II.
5. (T.C. No. 37. Gen. Reg. No. 4357) Trench K9' (8) Period V.
6. (T.C. No. 32. Gen. Reg. No. 4309) Trench A12' (5) Period IV.
7. (T.C. No. 172. Gen. Reg. No. 721) Trench B0 (3) Period II.
8. (T.C. No. 503a. Gen. Reg. No. 2706a) Trench D1 (16) Period VI.
9. (T.C. No. 151. Gen. Reg. No. 581) Trench C0 (2) Period I.
10. (T.C. No. 470. Gen. Reg. No. 2535) Trench A1 (17) Period VI.
11. (T.C. No. 491. Gen. Reg. No. 2830) Trench B5 (3) Period II.
12. (T.C. No. 23. Gen. Reg. No. 4136) Trench K9' (8) Period V.
13. (T.C. No. 104. Gen. Reg. No. 306) Trench B1 (3) Period II.

VARIETY (ii)
SMOOTH TYRED WHEELS

14. (T.C. No. 6. Gen. Reg. No. 3342) Trench A8' (4) Period III.
15. (T.C. No. 38. Gen. Reg. No. 43600) Trench A10' (11) Period V. Broken
16. (T.C. No. 19. Gen. Reg. No. 5052) Trench I11' (4) Period III.
17. (T.C. No. 9. Gen. Reg. 3653) Trench A9' (6) Period IV.
18. (T.C. No. 506. Gen. Reg. 2722) Trench D1 (17) Period VI.
19. (T.C. No. 503b. Gen. Reg. 2706b) Trench D1 (16) Period VI.
20. (T.C. No. 14. Gen. Reg. 3075) Trench A8' (4) Period III.
21. (T.C. No. 2. Gen. Reg. 3144) Trench A6' (3) Period II.
22. (T.C. No. 30. Gen. Reg. 4308) Trench K9' (8) Period V.
23. (T.C. No. 36. Gen. Reg. 4356) Trench K9' (8) Period V.
24. (T.C. No. 29. Gen. Reg. 4252) Trench A10' (8) Period V.
25. (T.C. No. 39. Gen. Reg. 4377) Trench A12' (8) Period V.
26. (T.C. No. 35. Gen. Reg. 4355) Trench K9' (8) Period V.

VARIETY (iii)
SPOKED WHEELS WITH HUB ON ONE SIDE

27. (T.C. No. 31a. Gen. Reg. 430c) Trench N. Ext. of A9', A10' (5) Period IV
28. (T.C. No. 15. Gen. Reg. 3906) Trench A7' (5) Period IV.
29. (T.C. No. 171a. Gen. Reg. 720) Trench C0 (2) Period I.

VARIETY (iv)

COLLARED WHEELS (THESE ARE SMALL IN SIZE)

30. (T.C. No. 2. Gen. Reg. 3118) Trench A6' (3) Period II.
31. (T.C. No. 17. Gen. Reg. 4011) Trench III' (6) Period IV.

VARIETY (v)

THICK SOLID WHEELS WITHOUT HUB OR COLLAR

32. (T.C. No. 20. Gen. Reg. 4096) Trench A11' (8) Period V.
33. (T.C. No. 34. Gen. Reg. 4345) Trench N. Ext. of A9', A10', A11' (5) Period IV.
34. (T.C. No. 31. Gen. Reg. 4026) Trench K10' (4) Period III.
35. (T.C. No. 28. Gen. Reg. 4185) Trench K9' (8) Period V.
36. (T.C. No. 26. Gen. Reg. 4145) Trench K9' (8) Period V.
37. (T.C. No. 16. Gen. Reg. 4998) Trench A7' (4) Period III.
38. (T.C. No. 8. Gen. Reg. 3596) Trench A10' (7) Period V.

VARIETY (vi)

THIN SOLID WHEELS WITHOUT HUB OR COLLAR

39. (T.C. No. 4. Gen. Reg. 2804) Trench A10' (1) Period II.
40. (T.C. No. 10. Gen. Reg. 3736) Trench A8' (4) Period III.
41. (T.C. No. 25. Gen. Reg. 4146) Trench A8' (5) Period IV.
42. (T.C. No. 2. Gen. Reg. 8) Trench B1 (1) Period I. Smaller in size.

SECTION - K

TOY CARTS (Pl. XL1a.)

Sir Mortimer (*Charsada* P. 114) has illustrated only one example of toy cart. At Shaikhani Dheri they are found in large number. They are hand-made and burnt red. All of them are holed for wheels and string. Only one exception with a cart frame without holes. Only the front portion of this cart frame is preserved, which shows an arch-like formation in which the animal was probably placed for pulling the Cart. No complete example was found. They are classified under two varieties.

VARIETY (i) The Cart frame with holes.

VARIETY (ii) The Cart frame without holes.

VARIETY (i)

CART FRAMES WITH HOLES (Pl. XL1a 2-4)

1. (T.C. No. 203. Gen. Reg. 960) Trench A5' (1) Period II.
2. (T.C. No. 929. Gen. Reg. 3593) Trench K9' (3) Period II.

3. (T.C. No. 935. Gen. Reg. 4127) Trench K9' (7) Period V.
4. (T.C. No. 462. Gen. Reg. 722) Trench A0 (2) Period II.
5. (T.C. No. 934. Gen. Reg. 3843) Trench A5' (2) Period II.
6. (T.C. No. 488. Gen. Reg. 2633) Trench X0 (3) Period II.
7. (T.C. No. 928. Gen. Reg. 3735) Trench J11' (1) Period II.
8. (T.C. No. 931. Gen. Reg. 3842) Trench A8' (3) Period II.
9. (T.C. No. 993. Gen. Reg. 3841) Trench A8' (3) Period II.
10. (T.C. No. 382. Gen. Reg. 2096) Trench D1 E1 (4) Period II.
11. (T.C. No. 927. Gen. Reg. 3309) Trench A4' (5) Period II.
12. (T.C. No. 925. Gen. Reg. 3217) Trench A4' (5) Period III.
13. (T.C. No. 932. Gen. Reg. 3840) Trench A7' (3) Period II.
14. (T.C. No. 938. Gen. Reg. 4040) Trench A10' (11) Period V.
15. (T.C. No. 219. Gen. Reg. 1037) Trench B2 (1) Period I.
16. (T.C. No. 926. Gen. Reg. 3258) Trench A9' (2) Period II.
17. (T.C. No. 937. Gen. Reg. 4238) Trench K9' (8) Period V.
18. (T.C. No. 286. Gen. Reg. 1570) Trench C0 (4) Period II.
19. (T.C. No. 936. Gen. Reg. 4155) Trench K9' (8) Period V.
20. (T.C. No. 161. Gen. Reg. 627) Trench B1 (2) Period II.
21. (T.C. No. 930. Gen. Reg. 3747) Trench A7' (3) Period II.

VARIETY (ii)

THE CART FRAME WITHOUT HOLE

22. (T.C. No. 260. Gen. Reg. 1332) Trench E1 (4A) Period II. Plate XLIIa, No. 1.

10. INSCRIPTIONS (Fig. 8, P. 111).

In our excavation we recovered only Kharoshthi inscriptions as many as thirty seven in number. Two of them are quite large but a few have just one letter and other scratches like *Swastika* marks, which are not illustrated here. Almost all the inscriptions belong to the Kushana period and are generally Buddhist in nature, recording the remains of the dead named in the inscriptions. Some record the names of the owners, as on the dabber (No. 5). They are all private records. None of them is royal. Hence we do not get the names of the ruling kings. The inscription No. 23, which records a date, doubtfully read as 9, is very loosely scratched. The lid, on which it is inscribed, belongs to Early Kushana period. It is difficult to refer this date to any known era. The writing of inscription No. 1 is in the Kushana cursive style but the others generally show angular forms. The language in all the examples is Prakrit.

The catalogue is given below:-

No. 1. Catalogue No. 17 (Pl. XXII. 2)—engraved on the back of a pedestal.

Engraving is rather poor. The lines are just scratches on the surface of a schist stone. Unfortunately the first few letters of the first line are broken off. They contained the name of the donor. The writing follows the cursive Kushana style¹ which was introduced in the time of Kanishka. The inscription reads —

Line 1²*Sonatina-putra-dana anasha-Vo*

Line 2 *ghasa-charyana-bhishu Naradakha Chira-tithito*

TRANSLATION

Gift of the son of Sonatina, The remains of the monk, Naradakha, the teacher of *Voghasha*, may endure for ever.

No. 2. Catalogue No. 28. trench F1 (4). Engraving on a red-slipped sherd of a bowl. The writing style is angular and belongs to the second³ group of the Kushana period.

The inscription reads— *Bhrathiasa Chudu hia*

TRANSLATION

Of the brother Chuduhi.

No. 3. Catalogue No. 14. trench D1 (5-B). Deeply engraved on the body of a narrow-mouthed longish pot, red in colour. The style is simple cursive. The inscription reads — *Selasa-dana mukhe asoa-dana*.

TRANSLATION

Gift of Sela, the gift of Asoa.

No. 4. Catalogue No. 21. Trench C1 (5). Engraved on the inner side of the rim of a bowl, material greenish schist, broken, only a few letters recovered. The inscription reads—*Sathakasa Maga-thaja*.....

TRANSLATION

.....Of *Sathaka*, son (?) of a *Magadha* (?).

No. 5. Catalogue No. 29. trench C3 (2), deeply engraved on the body of a terracotta dabber, not well fired. The inscription reads:- *Pipadhiasa*.

TRANSLATION

Of *Pipadhia*.

No. 6. Catalogue No. 8 trench C0 (2). Engraved on the base of a flat-bottomed bowl, red in texture. The style of writing is angular. The inscription reads — *Kharas'irie*.

TRANSLATION

Of *Kharas'ri*,

1. See A.H. Dani — *Indian Palaeography*, Oxford, 1963, P. 269.

2. The lack of diacritic marks is much regretted as it is not available in the local Press.

3. Dani — *Op. Cit*, P. 267.

Fig.8

No.11 (Cat.32)

קוּשׁוּן קוּשׁוּן קוּשׁוּן

No.12 (Cat.30)

פּוּשׁוּן פּוּשׁוּן

No.13 (Cat.1) פּוּשׁוּן

No.14 (Cat.2) פּוּשׁוּן

No.15 (Cat.3) פּוּשׁוּן

No.16 (Cat.10) פּוּשׁוּן

No.17 (Cat.16) פּוּשׁוּן

No.18 (Cat.31) פּוּשׁוּן

No.19 (Cat.34) פּוּשׁוּן

No.20 (Cat.35) פּוּשׁוּן

No.21 (Cat.33) פּוּשׁוּן

No.22 (Cat.36) פּוּשׁוּן

No.23 (Cat.37) Written in a

circle, beginning from inside

פּוּשׁוּן (?) פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.10 (Cat.5)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.1 (Cat.17)

No.2 (Cat.28)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.3 (Cat.14)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.4 (Cat.21)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.5 (Cat.29)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.6 (Cat.8)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.7 (Cat.9)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.8 (Cat.11)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

No.9 (Cat.4)

פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן פּוּשׁוּן

- No. 7. Catalogue No. 9. trench A0 (1) pit 1. Engraved on the body of a black polished fragment of a bowl. Only three letters. It reads: *Misa va..(?)*
- No. 8. Catalogue No. 10, trench. F0 (5), engraved on the outside wall of a dark grey fragment of a bowl in cursive style. It reads—*Shaka Asya.*

TRANSLATION

Of *Shaka Asa.*

- No. 9. Catalogue No. 4 trench F1 (3), lightly scratched on the outside of a big bowl, red ware. The letters have an unnecessary flourish at their foot consisting of an upward slant either to the right or to the left. If we do not take into consideration these flourishes, we can read—*Neyi-Dana.*

TRANSLATION

Gift of Neyi.

- No. 10. Catalogue No. 5. trench E0 (4), engraved on the outside wall of a bowl, light grey in colour. Style is angular. Only three letters—*Nanaka (?)*
- No. 11. Catalogue No. 32. trench A3' (1). engraved on the outside of a red ware handled jar. The style is rather angular. It reads—*Saghabudhasa S'ameasa.*

TRANSLATION

Of the *Sramana* (monk) *Sangha-buddha.*

- No. 12. Catalogue. No. 30, trench A4' (1), engraved on the outside of a grey ware sherd. It reads — *S'retha nage.*

TRANSLATION

Best of Elephant.

- No. 13. Catalogue No. 1. trench D0 (1), engraved at the base of a flat-bottomed bowl reddish in colour, in angular style. It reads — *KO.*
- No. 14. Catalogue No. 2. trench E0 (2), engraved at the base of a dish, red in texture, in angular style. It reads — *Ka.*
- No. 15. Catalogue No. 3. trench B0 (2), engraved on the outside body of a light grey bowl in angular style. Besides the letter we have also a later cross scratched on it. The reading is *Gha.*
- No. 16. Catalogue No. 10. trench D1 (5). engraved on the inner side of a shallow saucer, red in texture. It reads — *Tos'o....*
- No. 17. Catalogue No. 16. trench B1 (6), engraved on the outside of a red ware rim. It reads — *Meri.....*
- No. 18. Catalogue No. 31. trench A6' (1), scratched on the rim of a red ware bowl. It reads — *.....Vishu.*

- No. 19. Catalogue No. 34, trench J8' (2), engraved on the outside of a red-slipped rim of a bowl. It reads — *TO*.
- No. 20. Catalogue No. 35, trench A8' (3), engraved on one face of a long terracotta weight, square in section, burnt light red. — *Pubhae*.
- No. 21. Catalogue No. 33, trench A6' (2), engraved on the outside of a red ware rim of a bowl. It reads — *Pa*.
- No. 22. Catalogue No. 36, trench A10' (4) engraved on the rim of a fine red ware sherd. It reads — *Vhriacha.....*
- No. 23. Catalogue No. 37, trench A7' (4), scratched lightly on the inside of a saucer-shaped lid, red ware. The style is angular. It reads —
Khaganathasa naeasa ioshavasa s'irayaasha dhiinasato ..4 4 l.....

TRANSLATION

(The remains) of Khaganatha, Naea, Ioshaya, S'iraya (and) Dhiina, (the year) 9 (?).

11. MINOR OBJECTS

In the subsequent chapters we shall describe beads and other ornaments and selected pottery. Here we give an account of other minor objects such as grinding mill stones, perforated ring stone, pounders, pestles and mortars, querns, whetstones and sharpeners, architectural parts like doorposts and worked discs, lamps, weights, turned stones, iron objects, copper materials, seals and sealings. These miscellaneous objects throw a flood of light on the technical skill employed in the day-to-day life of the people. While turned stones and iron and copper objects speak of a developed technical knowledge, perforated stone and grinding stones bear evidence of traditional system though legged grinding stone is a great improvement. We get the materials of this improved technical knowledge right from the Greek level onwards.

GRINDING MILL STONES

A number of grinding mill stones were found in the excavation. Three of them came from the House of Naradakha. They are all made of granite and belong to one main type (Pl. X, No. 1) round in shape. Each of them is made up of two parts — the lower base which is flat at the bottom and slightly slanting outward on the top surface with a marginal edge to hold the wheat for crushing. The centre of the base is raised up for a hole to take in an axel (one of iron was actually found). The upper stone has its lower base shaped to rest properly on the top of the lower one and has a hole in the middle for the axel and further a straight rectangular groove across the top in the middle, in which a wooden handle was fitted for turning the stone. Obviously it was a hand mill stone and probably used by the ladies, as is done today in the villages. The wheat was inserted through the hole around the axel. The surface of the stone was prepared by pecking technique.

PERFORATED RING STONE

One specimen of perforated ring-stone, bearing register No. 2479 from trench

D1 (9), was found. It is made of granite. The perforation is made from either side. The edge is thinner. Its diameter is 4" and height 1.4".

CYLINDRICAL GRINDING STONES OR POUNDERS

They are found in the excavation in large number and are generally made of granite, but examples of red sandstone and grey sandstone have also been recovered. They are of two varieties —

- (i) Those for rubbing on the elongated round face by two hands. They are generally elliptical in section and their ends are rounded. In some cases the ends are flat to be used for crushing before rubbing.
- (ii) Those for crushing at one end or both ends, used as a pestle. These are flatter at the ends and narrow in the middle for grip. This second variety is of red sandstone obtainable locally in the Peshawar region.

MORTAR

Two varieties of mortar were found:

- (i) One broken example of a mortar, No. 1974, was found in trench D1-E1 balk (3) of bluish schist. Its upper face is shallow and smooth like a bowl with a prolongation for the spout but the base is flat having two incised circles. The interior space in the inner circle has further engraved lines. It was probably used for grinding wet materials, which could be poured out after crushing.
- (ii) Another variety is of pinkish sandstone. It is a fragment of a deep bowl, No. 1292 from trench A5 (2).

QUERNS (GRINDING STONES)

They are mainly of two varieties:

- (i) The first variety is a saddle-shaped quern with a narrow waist and broad ends and having curved upper surface. All the examples are of granite.
- (ii) The second variety is a legged quern found as deep as the Greek level, A8' (7). Each one of them has four legs. The top surface is flat. In one example, No. 1054, from trench A0 (3) the foot is rounded. In other cases the foot is flat. They are either of phyllite or red sandstone. All the red sandstone examples have incised decorations on the sides. One, bearing No. 2683 from trench C3 (2), has floral pattern on the sides.

WHETSTONE AND SHARPENER

A number of examples of whetstones for sharpening tools were found in the excavation. They are generally rectangular with smoothed upper surface. One example from trench A8' (7) No. 4289 has several pits made after sharpening. Another example (pl. XLIIIa, No. 1) No. 1218 from trench B3 (2) of light grey schist is of an elongated variety probably for sharpening barber's razor. A third one, No. 2514 from trench D1 (9) is smaller in size but has a hole at one end.

DOORPOSTS

Two stone doorposts round in shape with a cavity in the middle for the hinge were found in the excavation. One of them No. 4132 comes from trench K9' (7).

WORKED DISC.

Two large *Kanjur* worked discs, diameter 14'' and height 6'' came from trench E0 (1). They are obviously pillar bases.

BRICKS

The burnt bricks from the top levels measure:-

- (1) 11''x11''x2''
- (2) 12''x12''x2 ''.
- (3) 13''x9''x1 ''.

LAMPS

Large number of lamps were recovered from the Scytho-Parthian and Kushana levels. Four of them are of schist. The first one, No. 1845 from trench C5 (1) (See P. 118, Fig. 9, No. 14) is of an ornamental type, the second one, No. 2779 from trench C4 (2) is devoid of ornamentation. Both come from the House of Naradakha. They are heart-shaped, with three projections, one at the back and one on each side nearer to the wick point. These projections appear to represent handles. The ornamental lamp has scalloped edge and handle carved in the shape of a flower. No. 2437 from trench C5 (2) (broken) and No. 3210 from trench K11' (1) are also of schist. They are elliptical in shape and decorated with lotus petals on the exterior and having scalloped edge.

The remaining lamps are all in terracotta. Their number is large. They are all fired red, except a few examples which are blackened by smoke. None of them approaches the shape of the schist lamps described before. These terracotta lamps fall in two main types:

Type 1. It is the largest in number. It consists of a small cup on a disc-shaped flat base with one point pinched for the wick. Varieties may be distinguished on the basis of the rims of the cup. In some examples the rims are incurved. In others it is straight. In a few examples, where the cups are shallower, the rims are cut at an angle. The cups have slanting sides, tapering down to the base, except in the case of the lamps where the rims are straight. In these cases the sides are convex.

Type 2. Only eight examples of the second type were found. They may be described as ash-tray type, having flat cut-base, thick sides with an inward curve at the rim and pinched mouth for the wick. This type is found only in the Kushana period.

WEIGHTS

As many as seventy eight examples of weights were found in the excavation. The large majority of them are spherical. Their number is sixty. They are of terracotta and stone, generally of granite, and vary in size and weight considerably. The heaviest weight, No. 903, picked up from the surface, comes to 539.4 grammes. No. 1545, which weighs 484.9 grammes, comes from trench D1 (5b). The smallest, recovered from trench B0 (3), weighs 1.9 grammes. These spherical balls are natural stones. Some of them show pecking on the surface. They have been doubtfully taken as weights. If they are not weights, they could as well be used as sling balls. Only one such weight, No. 2532 (slightly damaged) came from the Greek level, trench D1 (11).

The second type is definitely a weight. It is a truncated cone, square in section, with a cross hole towards the top (pl. XLIIa). They are twelve in number and are all of terracotta. They also vary in size as well as in weight. Three of them bearing numbers 4240, 4358 and 4262 came from trench K9' (8), and No. 4302 (broken) from trench A9' (15) — all these four from Greek levels. One of them bearing No. 113 (slightly broken) from trench A0 (1) shows two dots within a circle incised on the top face. Does it indicate quantity? Another bearing No. 3146 from trench A8' (3) is inscribed with three Kharoshthi letters *Pubhae*. The hole on the top suggests that these weights were hung in the balance.

The third type is also a truncated cone but circular in section and has no hole. No. 4251 comes from trench A10' (8). It is also of terracotta. The second bears the number 3257 and comes from trench A9' (2). It is of quartzite.

There are four examples of dark brown soap stone, square in section, nearly cubical, small in size. One bearing No. 2611 from trench C1 (4) measures 2.5 grammes and the other No. 64 from the same trench measures 1.1 grammes. The last two types were obviously used in proper balance.

TURNED STONES (See P. 118)

A number of fragments of turned stones were discovered in all the periods, the largest quantity came from the Kushana levels. We did not recover complete pieces except a few small saucer-like trays and model stupa drums, already described under the section of 'Sculptures' (Fig. 9 Nos. 6, 7, 10). The majority of them are fragments of bowls, dishes and saucers. Some of them have incised lines or other designs on the inner side. Others are fragments of relic caskets, lids and miscellaneous objects as given below:-

1. A small saucer of schist with a lotus design in the centre and a circular band of criss-cross pattern on the margin — both on the inner side. No. 3968 from trench I 10' (3).

2. Saucer-like lid of soap stone with a *swastika* on the back side and on the inner side three circular raised mouldings encircled by a bifoliated tendril. (pl. XLIIIa, No. 3). Red marks on the interior, No. 3862 from trench A8' (4).

3. Fragment of a dish of soapstone (pl. XLIIIa, No. 5) with beautiful leaves carved on the exterior of the rim. No. 3583 A from trench A6' (4).

4. A soapstone rod with a full moon towards the top (pl. XLIIIa, No. 4) having a hole right through to be attached with other parts of the rod. Probably part of a priestly sceptre. No. 4121 from trench K9' (7).

5. A schist model of three umbrellas on a rod (*Chhatravali*) belonging to a stupa. No. 251 from surface (Fig. 9 No. 5).

6. A small bowl (Fig. 9 No. 9) of light grey phyllite having simple incised concentric lines on the inner base and on the edge of the rim. No. 2300 from trench A1 (4).

7. A schist pedestal with a solid flat base, narrow waist having three incised lines and cup-like stand on the top. No. 4081 from trench A8' (6).

8. Lid (broken) of soapstone with a turned knob (pl. XLIIIa, No. 2) on the top and lotus petals opening out from the knob, each petal being separated from each other by a row of chevrons. No. 3879 from trench A9' (5).

9. Lid (broken) of soapstone with a turned knob (Fig. 9. No. 13)) on the top and a girdle of incised lines at the foot of the knob suggesting sun-motif. Beyond this girdle deep lines emerge across the lid. No. 1189 from trench B2 (2).

10. Lid (broken) of soapstone with a turned knob on the top and a number of concentric circles on and around the knob. No. 3312 from trench A6' (4).

11. Knob of a lid of soapstone having incised concentric circles. No. 4036 from trench A3' (7).

12. Knob of a lid of soapstone, rather flattish and simple, No. 3849 from trench A7' (4).

13. Lid (broken) with the solid stem of a knob, the stem having three incised lines in the middle. No. 4205 from trench A8' (6).

14. Lid (broken) of soapstone with three incised lines on the top. No. 2941 from trench A4' (2).

15. A pedestal of phyllite (broken) like No. 7 above. No. 386 from trench F0 (3).

16. A square casket (box-shape) of schist 2'' x 2'' x 1'' carved with four-petal lotus motif. No. 2703 from trench D1 (5B).

17. A small drum of a model stupa (Fig. 9. No. 8) of schist having a frieze of criss-cross lines in the middle of the drum and a raised moulding below it. It is hollow inside. No. 1919 from trench B3 (3).

18. Base of a round casket with a flat base, having incised lines on the sides. It is of schist. No. 3220 from trench K11' (1).

19. Fragment of a bowl-like casket with a projection on the top for receiving a lid. It is of soapstone. No. 4218 from trench I 11' (6).

20. A saucer of grey phyllite (probably used as a cover) with a raised button in the middle and concentric lines having incised circle. From the button lines emerge like rays. No. 1697 from trench A3 (2) (Fig. 9. No. 1).

TURNUED STONES

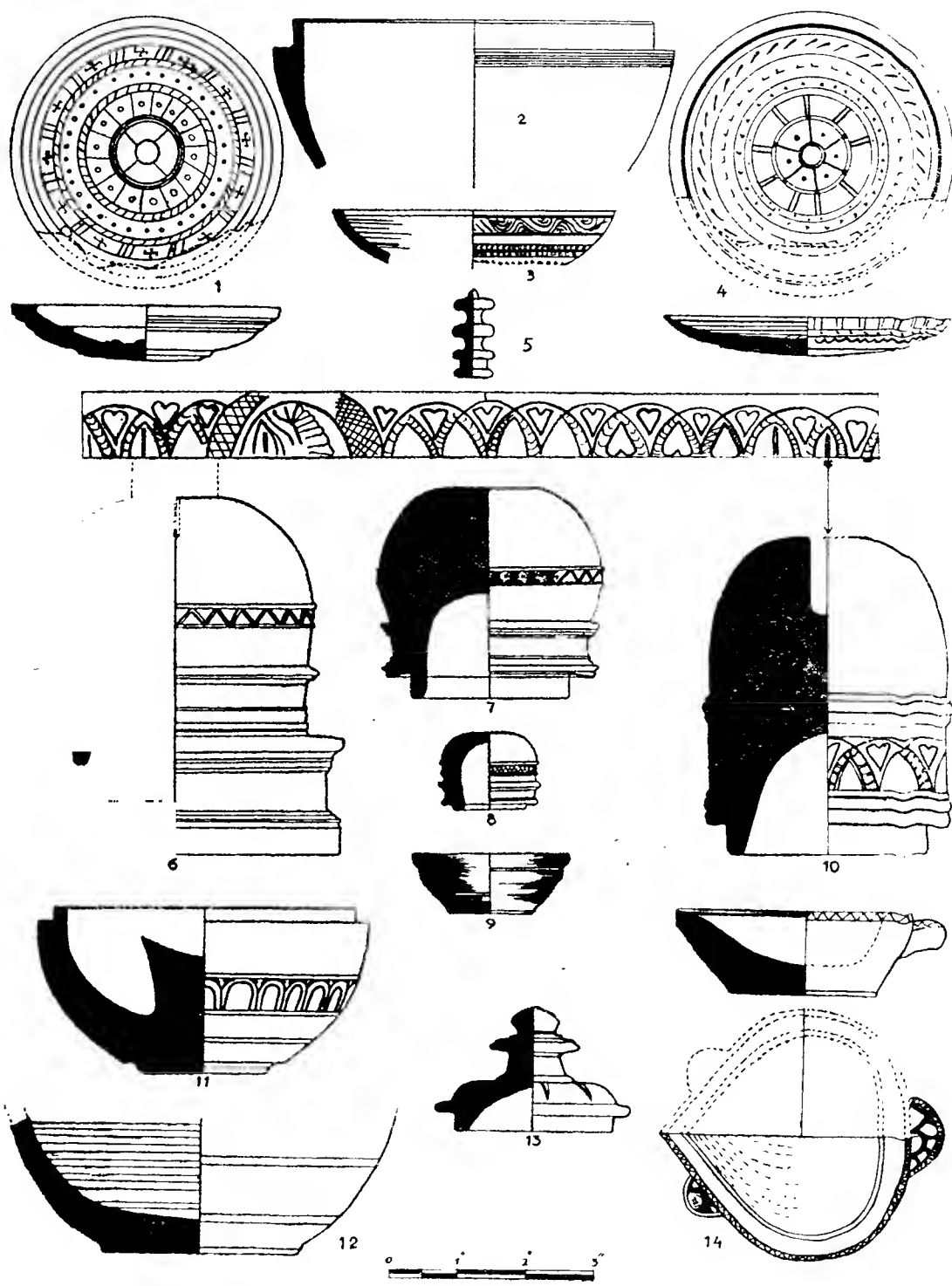


Fig. 9

21. A saucer of whitish marble with blue stains (probably used as a cover) with lotus button in the middle and having concentric lines with wedge decorations in between. (Fig. 9. No. 4.) No. 1285 from trench B5 (2).

22. A square-shaped lid with a round knob and other concentric steps of soapstone. No. 212 from trench B1 (2).

23. A round lid with a plain knob of dark soapstone. No. 1485 from trench A4 (1).

We have not listed here large number of bowl pieces recovered from the Kushana period but a few fragments obtained from the Greek level are given below:

24. A rim fragment of a small dish with two incised lines below the rim. It is of phyllite. No. 2669 from trench D1 (15).

25. A rim fragment of a small dish of soapstone. The rim, which slopes outward like a thumb, has double incised lines on the top and one below it. No. 2593 from trench D1 (12).

26. Schist fragments of a large bowl having a disc-shaped base. No. 2504 from trench A1 (15).

27. A fragment of a bowl of soapstone similar to No. 26. No. 4338 from trench A10' (11).

IRON OBJECTS (pl. La)-

Pieces of iron have been found through all the levels in the excavation. The number of pieces in the lower levels is less in number. They were all heavily oxidised and many of the fragments are difficult to identify. The greatest number of the iron objects were found in the House of Naradakha and related to the doors and the timber roof used over the shrine pavilion. As such most of the materials are various types of nails, door knobs, door hooks, door chains, door shutters, timber joiners and varieties of keys. One important find from the same house, trench C4 (2), consisted of a group of scales, each of oval shape, about 3'' in length, having a series of holes on the margin for fixing into an iron armour. From the Greek level, trench A9' (9), one important find was a shaft-hole axe No. 4067 (pl-La, No. 1). The axe has its edge splayed at one end where it meets the vertical concave side but the other side is straight. This type of axe is prevalent even today in this region. In India we generally have both the sides concave and the edge splayed both ways. One arrow-head No. 4194 found from trench A10' (8) is solid and faceted, ending in a point and the other side having a tang. In the post-Greek period we get three-flanged arrow-heads. They have been found in all Kushana levels and they vary in size. Another remarkable discovery from the House of Naradakha, trench B4 (2), is a broken double-edged straight sword No. 1232 of the same type as we notice in the Kushana coins at the waist of their emperors. The keys are of two varieties-(i) those having teeth attached at a right angle to the handle (pl. La, Nos. 5 and 10) and those which have a fan-shaped head (pl. La No. 8). The nails can be classified into three types (i) conical headed (pl. La No. 9), (ii) flat-headed (pl. La Nos. 6 & 7), and (iii) those having hook at one end. The knives (pl. La

No. 2) have prongs for attachment to a handle and have slightly curved edge. One beautiful example of a laddle No. 3864 from A8' (5) (pl. La No. 4) was obtained. A round iron spoon (pl. La No. 3) No. 4243 from trench A8' (6) was also found. Another remarkable find was an iron cart joint, slightly curved, No. 3871 from trench A2' (6).

TERRACOTTA SEAL IMPRESSIONS

No. 1—A terracotta sealing, $\frac{2}{3}$ " in diameter, almost round, impressed on one face, the other being curved, showing two armed persons face to face, holding bow in one hand and the other raised as if in argument. Both are putting on helmet. No. 2764 from trench C4 (3) from the House of Narakha below the burning Pl. XLVII. No. 2.

No. 2—An irregularly faceted sealing bearing an incised tree motif on one face and two armed figures on the other. No. 6889 from trench B0 (3). Pl. XLVII, No. 3.

No. 3—Another sealing bearing deep impression of two figures on one face, the other rounded, diameter, $\frac{1}{2}$ ". No. 2050 from trench C4 (2). Pl. XLVII, No. 5.

No. 4—A seal impression in high relief of a human bust, the man putting on helmet. The style is classical. No. 2335 from trench A5 (5), Scytho-Parthian level Pl. XLVII, No. 4.

No. 5 — A seal impression showing a bird, probably crow, seated on a walking elephant. No. 843 from trench C0 (2) Pl. XLVII, No. 1.

GAMESMEN

No. 1 (pl. XLIIb, No. 5) A terracotta cube showing marks 6, 5, 4, 3, 2 and 1 on different faces for playing games. No. 1250 from trench K9' (7), Greek level.

No. 2. (pl. XLIIb, No. 4) A long (broken) dice, bar-shaped, with two incised lines at one end, showing two circular marks on one preserved face and one each on the other No. 1708 from trench A3 (1).

No. 3. An ivory (broken) dice, bar-shaped, bearing marks of concentric circles (pl. XLVIII, No. 9) No. 1654 from trench A2 (3).

No. 4. An ivory dice, bar-shaped, bearing marks of concentric circles (pl. XLVIII, No. 11) 4, 3, 2 and 1 on different faces. No. 654 from trench C1 (2).

No. 5. An ivory bar (broken) with a hole right through the long side, having six circular marks (pl. XLVIII, No. 6.) on one face within two long straight lines. No. 589 from trench A1 (2).

No. 6. An ivory (broken) circlet with three concentric marks (pl. XLVIII, No. 3). No. 3315 from trench A5' (3).

No. 7. An ivory gaming stand piece, almost conical in shape, No. 576 from trench C1 (3). (pl. XLVIII, No. 10).

TERRACOTTA SEALS, DABBERS AND OTHERS

No. 1. A terracotta knob (pl. XLIIIb, No. 1 and 2) No. 1 having incised rays emanating from the knob, No. 2504 from trench B1 (8).

No. 2. A terracotta seal (pl. XLIIIb No. 3 and 4) with a lotus design. No. 160 from trench D1 (2).

No. 3. A terracotta seal showing a design of four — petalled flower in the same fashion as No. 1 above. No. 1103 from trench B0 (4).

No. 4. A terracotta knobbed seal (pl. XLIIIb, No. 5 and 6). No. 3774 from trench A2' (5).

No. 5. A terracotta inscribed dabber showing smoky marks (pl. XLIIb No. 1). There are five Kharoshthi letters, reading *Pipadhiasa*. No. 2813 from trench C3 (2). (pl. XLIIb, No. 2) is another example of the same.

No. 6. A terracotta rattle for children (pl. XLIIb, No. 3).

No. 7. Five crucibles (pl. Lb) having greenish marks inside, used for high temperature firing. All of them came from trench B5 (7).

No. 8. A base of a glass bottle (pl. Lb No. 4) No. 2811 from trench C4 (3).

No. 9. Glazed tile pieces. One of them came from A8' (5).

12. BEADS AND OTHER PERSONAL ORNAMENTS

Contributed by Mr. Abdur Rehman

At Shaikhan Dheri the excavations conducted in 1963-64 have yielded no less than eight hundred and six specimens representing beads, bangles, finger-rings, hair-pins, stoppers, copper mirror, antimony rods, nail-parer, combs, ear-rings and pendants. The major portion of this cultural wealth comes from the Kushana and the Seytho-Parthian levels with a fair sprinkling in the layers attributed to the Greeks. It is noteworthy that material opulence of the Kushanas and Seytho-Parthians stands in marked contrast to that of the Greeks, as the present evidence tends to suggest, even if we make some allowance for the restricted digging in the pre-Kushana levels.

Among the materials for beads the prime favourite at all periods was faience, perhaps due to its easy manipulation, with shell and glass being second choice, whereas carnelian and quartz are equally represented. Terracotta beads occur from top to bottom. In this material, the types 'convex cone with grooved base' and 'convex cone with flat base' are invariably wheel turned, occasionally coated with pinkish or grey slip. It may be mentioned that both the above mentioned types tend to concentrate in the layers assignable to the Middle Kushanas. Similar beads called 'lop sided beehive shaped'¹ were found in the adjacent mound of Bala Hisar. the latest with the Gandhara material².

1. Wheeler, Sir. Mortimer. *Charsada*, 1962, pl. XXXIX. fig. 6 (dated from third century B. C. to fourth century A D.)

2. *Ibid*, P. 116, type III.

Ivory appears to have been used very sparingly --- there being two beads, two combs and four antimony rods (so far as toilet objects are concerned), almost equally distributed at all levels. Conch shell (especially *Xancus pyrum*) holds the premier place among the materials used for making bangles: others being glass and copper. It may be pointed out that glass bangles tend to concentrate in the Scytho-Parthian levels whereas shell bangles, including the ornate specimens, appear to be a Kushana speciality. Iron, copper, silver, shell and precious stones were used for making finger rings. Gold ornaments are very few.

Among the beads of semi-precious stones numbers 25 and 27 (illustrated below, pl. XLIV, 25; XLVI, 27) are admirable examples of skill of the lapidaries, so far as the excellent polish of the beads is concerned. Both belong to the Kushana layers. The axial perforation was made with the help of a drill in a single operation from one end to the other, at least in these two cases, and the results were adroitly achieved. However, there are other specimens to show that such an operation occasionally resulted in an unwanted slight fracture near the axial perforation due to the one sided pressure exerted by the drill. Quite a few of the beads, incidentally all belonging to the Kushana levels, show that drilling from both ends was also practised, though not perfected even at the latest levels as the borers sometimes went slightly astray — not in a straight line — making it difficult to pass a thread through the hole¹. No such example is found, in the present excavations, in the pre-Kushana levels. It may be a chance though it goes without saying that elsewhere these techniques were known much earlier².

Almost all the basic shapes represented in the Shaikhan Dheri beads can be traced much earlier³. Similar types were found in Bhir Mound as well as at Sirkap⁴ except the one here named as *Kamandalu*-shaped (pl. XLIV, 15) which stands unique in this part of the country. In this type three specimens were found — two of paste and one of light blue translucent glass. Used as drop pendants, these are barrel-shaped in the middle with a circular base and rectangular top. All the three examples belong to the layers attributed to the Kushanas. It may be interpolated that none of these types, in semi-precious stone, was found at the adjacent mound of Bala Hisar in the vertical trench laid there in 1958⁵.

Collared beads have long been reported from many sites with the implication of a fairly wide special and chronological distribution⁶. In West Pakistan the earliest proto-types go back to Mohenjodaro⁷ coming from what

1. Owing to the rarity of precious stones in the neighbouring area, there is little likelihood that they could well have been the products of untrained hands, if, at all, they were locally made.

2. Marshall, Sir J., *Mohenjodaro and the Indus Civilization*, Vol. I, (1931), p. 511.

3. Mackay, E.J.H., *Further Excavations at Mohenjodaro*, Vol. II, Pls. CXXXIV-CXXXIX.

4. Marshall, Sir J., *Taxila II* (1951) pp. 732-735.

5. The chapter on Beads in *Charsada*, 1962, by Sir Mortimer Wheeler, contains no such examples. See Ch. X, 'Terracotta and Stone Bead', p. 116.

6. For a detailed discussion see 'Arikamedu' pp. 97-98 in *Ancient India* No. 2 (1946).

7. Mackay, E.J.H., *Further Excavations at Mohenjodaro* (1937), Vol. II, CXXXIV, fig. 9; and CXXXVI, fig. 58. Both the specimens are 'longitudinally ribbed and with a moulded collar at each end'. They are made of faience and 'both are still apple grey in colour'. The author of 'Arikamedu: An Indo-Roman trading station on the East coast of India' has referred to a similar example (footnote 3) from *Mohenjodaro and the Indus Civilization, III*, by Sir John Marshall (1931), pl. CLXIX, fig. 5; the present writer has checked it up but failed to find a collared bead.

Mackay called "Upper levels". At Taxila similar beads were found in Bhir Mound as well as in Sirkap. During the excavations at Arikamedu the typological difference between 'groove-collared' and 'lug-collared' specimens was observed suggestive of an early date for the former¹. At Shaikhan Dheri the 'lug collared' type is represented by a solitary example (pl. XLIV, 28) related to the Early Kushana period. It is unhappy coincidence that 'groove collared' beads, in semi-precious stone, are conspicuous by their absence at this site. However, in terracotta, this type is represented by no less than fifteen specimens — the earliest of them coming from the Greek levels. If the evidence of terracotta and that of solitary stone bead be taken together, it conforms well with the observation made at Arikamedu.

The wide distribution² and equally remote antiquity³ of the leech-shaped beads merit a brief discussion. Again, at Shaikhan Dheri, it is represented by a single example (Pl. XLIV, 31) assignable to the Scytho-Parthian period. At Taxila⁴ and Vaisali⁵ such beads are supposed to be a Mauryan speciality, and the three examples from Sirkap are written off as probable survivals⁶. Away from the Indus and Gangetic orbits, the leech-shaped beads are known from Hissar,⁷ Ur⁸ and Babylon,⁹ much earlier in date than those of Taxila. On the basis of 'exceptional quality of the agates, of which they are made and the rare technical skill with which they have been cut and polished' Marshall suggested a local Indian industry responsible for their production¹⁰. The present example, equally well polished, appears to be an importation from some neighbouring city and a probable survival.

The dagger-shaped pendants have been discussed elsewhere¹¹. This type, in agate and carnelian, was familiar at Taxila, approximately datable to the third century B.C.¹² Beads of this type are still manufactured at Cambay for export to Assam where they are known as 'tiger claws'.¹³ In the present excavations two specimens were found, in shell and pinkish quartz, attributed stratigraphically to the Middle Kushana period.

Most of the bangles — both of shell and glass — are plain, without any ornamentation. However, the selected specimens (illustrated below, Pl. XLIX, 1-9) exhibit a variety of decorative motifs consisting of incised lines, over-lapping scales, countersunk rosettes, cables, beaded outer face and conventionalised birds. The ornamental features were both carved in lower-relief and sunk on the flat surface. It should be noted that all these ornate

1. Wheeler, Sir Mortimer, Arikamedu, in *Ancient India* No. 2, pp. 97-98

2. Dikshit, M. G., *Ancient India* No. 8 p. 38. 'Beads from Ahichchatra. Describing the distribution of leech-shaped beads he mentions several specimens from Rajghat, Ghosi, Masan Dih and Madheri.

3. Vats, *Excavations at Harappa*, II (1940), pl. CXXXIX, 1

4. Marshall, Sir J., *Taxila II* (1951) p. 744

5. Dikshit, M. G., *Op. Cit.*, p. 39

6. Marshall, Sir J., *Op. Cit.*, p. 744

7. Schmidt, *Excavations at Hissar*, (1937), pl. XXXV: LXV

8. Wooley, C. L., *Ur. The Royal Cemetery*, (1934) p. 372, fig. 79; pl. 132, U12474

9. Koldewey, *Excavations at Babylon* (translated, 1914), p. 263, fig. 185.

10. Marshall, Sir J., *Taxila II* (1951) p. 744.

11. Dikshit, M. G., *Op. Cit.*, p. 41; pl. XI, fig. 48.

12. Beck, H. C., Beads from Taxila, *Mem. Arch. Surv. Ind.* No. 65 (1941) p. 31.

13. Dikshit, M. G., *Op. Cit.*, p. 41.

examples, having striking similarities with those found at Taxila,¹ came from post-Scytho-Parthian levels, implying a late date. This evidence is, in all details, in line with that of Taxila where, with the exception of three ornamented examples from Bhir Mound, all other ornate specimens are datable from third to fifth centuries A.D.² Of special interest among bangles is No. 9 (pl. XLIX) decorated in relief with a conventionalised bird having a vulture-like beak. Its occurrence in the uppermost stratum is consistent with other two specimens³ found at Dharmarajika three to two feet below the surface.⁴

Of the animals simulated in stone the most striking are: a lion (pl. XLVI, 3), a duck (pl. XLVI, 10) and a frog (pl. XLVI, 5). Lion head is also depicted, in relief, upon a finger ring (pl. XLVI, 2). Another specimen, a disc bead, shows a running stag sunk on the flat surface. It is noteworthy that all of them come from the Scytho-Parthian and Kushana levels. At Taxila similar examples were found in close association with the Buddhist religious sites.⁵

Among the toilet objects most significant are two hair-pins (Pl. XLIX, 17, 18) and a stopper for some antimony Phial (pl. XLIX, 19). The three are made of moulded copper and assignable to the Kushana period. The animal devices they exhibit are described below. Animal-headed hair pins from the Indus Valley cities and those from the near eastern sites are elaborately discussed elsewhere.⁶

1--BEADS

Among the personal ornaments found in different strata at Shaikhan Dheri, beads are the most prolific: the material for their manufacture being semi-precious stones including carnelian, lapis lazuli, jasper, chalcedony, amethyst, glass, crystal, quartz, oriental topaz, moonstone and turquoise: and ivory, shell, faience, paste, soapstone and terracotta. The total number of beads is four hundred and seventy four, of which terracotta alone is represented by two hundred and sixty three. Besides the finished products quite a few of them were found in unfinished condition along with glass slag and gastropod shells, undoubtedly intended for the local industry. On the basis of material they are grouped under the following heads:-

- (a) Semi-precious stones, and those of Ivory, shell, paste and faience are also included in this group.
- (b) Beads of ordinary stone turned and polished.
- (c) Terracotta beads and
- (d) Those of gold and copper.

1 Marshall, Sir. J., *Taxila III* (1951) pl. 201 (Nos. 3, 7, 15, 18, 20).

2 Marshall, Sir. J., *Taxila II* (1951) p. 668

3 *Ibid.*, Vol. III, (1951), pl. 201, fig. 36, 37

4 *Ibid.*, Vol. II., (1951), p. 672 (Nos. 36, 37)

5 *Ibid.*, Vol. II., (1951), p. 748.

6 Piggot, S., *Ancient India* No. 4 (1948): Notes on certain pins and a mace-head from Harappa, pp. 26-38 fig. 4.

GROUP (A) — SEMI-PRECIOUS STONES AND OTHERS

This group is represented by one hundred and ninety six specimens of which faience — the most favourite and the cheapest material, accounts for forty four. The largest number of beads come from the Middle Kushana level. The following table shows their distribution according to periods and materials employed for their manufacture.

DISTRIBUTION CHART

	<i>Late Kushana</i>	<i>Middle Kushana</i>	<i>Early Kushana</i>	<i>Scytho- Parthian</i>	<i>Greek</i>	<i>Total</i>
Faience	5	25	6	4	4	44
Shell	2	23	3	—	1	29
Carnelian ..	—	16	1	1	2	20
Glass	1	22	1	4	—	28
Quartz	2	11	5	2	—	20
Agate	1	7	1	—	1	10
Ivory	—	3	—	1	1	5
Soapstone ..	1	8	1	1	—	11
Lapis Lazuli ..	1	3	—	—	—	4
Turquoise ..	2	2	—	—	—	4
Granite	—	—	—	1	—	1
Paste	1	10	—	1	—	12
Jasper	—	2	—	—	—	2
Chalcedony ..	—	2	—	—	—	2
Oriental Topaz	—	2	—	—	—	2
Moonstone ..	—	1	—	—	—	1
Opal	—	1	—	—	—	1
Total	16	138	18	15	9	196

Typologically they fall into the following types:

- | | |
|--------------------------|----------------------------|
| (i) Cornerless cubes-22: | (ii) fluted barrel-17: |
| (iii) spherical-25: | (iv) Oblate-13: |
| (v) Barrel biconical-33: | (vi) Cylinder Circular and |
| (vii) pendants-9: | rectangular-36. |
| (viii) terminals-6: | (ix) Spacers-4: |
| (x) Hexagonal bicone-9: | (xi) Disc cylinder-6: |
| (xii) Miscellaneous-16. | |

Faience, light green in colour, was preferrably used for making beads of the fluted barrel type which is further divided into two varieties—(a) those having simple flutes and (b) those having broken flutes. A few of them have traces of golden glaze against light green back ground. Most of the beads made of faience show disintegrating surface. In the Kushana period, the lapidaries appear to be clever enough to make imitations almost indistinguishable from their originals in stone.

ILLUSTRATIONS

1. 3644. (type i) Lapis-lazuli: cornerless cube. Trench A7' layer (3). Plate XLIV.
2. 3316. (type i) Soapstone: cornerless cube. Trench A5' layer (3). Plate XLIV.
3. 719. (type ii) Faience: fluted barrel: traces of lustrous glaze can still be seen. Trench F0 layer (4). Plate XLIV.
4. 2774. (type ii) Faience: barrel with broken flutes; light green colour due to disintegration surface. Trench D5 layer (3). Plate XLIV.
5. 3336. (type iii) Quartz: Spherical, mottled surface. Trench A7' layer (3). Plate XLIV.
6. 3457. (type iii) Etched carnelian: Spherical; etching in the form of scattered circles. Trench A3' layer (4). Plate XLIV.
7. 738. (type iv) Shell: nearly oblate: white. Trench B1 layer (4). Plate XLIV.
8. 4080. (type iv) Agate: nearly oblate. Trench K9' layer (7). Plate XLIV.
9. 2406. (type v) Carnelian: barrel biconical. Trench B5 layer (5). Plate XLIV.
10. 3012. (type v) Carnelian: barrel truncated biconical. Trench A9' layer (3). Plate XLIV.
11. 1000. (type vi) Ivory: long cylinder circular. Trench D1 layer (5). Plate XLIV.
12. 1173. (type vi) Shell: short cylinder circular. Smoothly polished. Trench E0, layer (4). Plate XLIV.
13. 3607 (type vii) Quartz: pendant. Trench A9' layer (6). Plate XLIV.
14. 3262. (type vii) Shell: drop pendant, tabular. Trench A3' layer (2). Plate XLIV.
15. 1113. (type vii) Paste: pendant, *Kamandalu*-shaped, moulded. Trench E1, layer (4-a.) It comes from a pit. Plate XLIV.
16. 4045. (type vii) Shell: natural condition: pendant having alternating white and red veins: pierced at the top. Trench K9' layer (7). Plate XLIV.
17. 790 (type vii) Etched carnelian: tabular terminal: diagonally pierced. Trench A1 layer (3). Plate XLIV.

18. 352. (type viii) Lapis lazuli: terminal, oblate disc. Trench B0 layer (3). Plate XLIV.
19. 1977. (Type viii) Quartz: terminal, long truncated cone; ellipsoidal in section. Trench C0, layer (4). Plate XLIV.
20. 3617 (type ix) Shell: spacer; tabular double holed. Smoothly polished. Trench A9', layer (6). Plate XLIV.
21. 373 (type ix) Shell: Spacer, tabular; cut in the shape of four petalled flowers indicated by two grooved lines cutting at right angles in the middle, on one face. Trench B0, layer (3). Plate XLIV.
22. 2254. (type x) Glass: long hexagonal bicone; having iridescent surface remains on one side. Trench D1 E1, BK, layer (5b). Plate XLIV.
23. 839. (type x) Glass - opaque: hexagonal bicone. Trench E1 layer (4-a). Plate XLIV.
24. 888. (type x) Oriental Topaz - Yellow: hexagonal, truncated at both ends: nearly barrel. Trench B5, layer (1). Plate XLIV.
25. 1620. (type xi) Agate, banded: disc circular. Trench A3, layer (2). Plate XLIV.
26. 2832. (type xi) Jasper, banded: disc circular. Trench C3, layer (3). Plate XLIV.
27. 3416. (type xi) Agate, banded: disc circular with incised running stag on one side. Trench A6', layer (4). Plate XLVI.
28. 3424. (type Misc.) Amethyst: standard barrel lug-collared tabular. Trench A5', layer (4). Plate XLIV.
29. 1086. (type Misc.) Soapstone, cream colour: tabular, diamond shaped. Trench A4, layer (1). Plate XLIV.
30. 353. (type Misc.) Moonstone, white: Semi-circular, flat base. Trench B0, layer (3). Plate XLIV.
31. 2404-a. (type Misc.) Carnelian: flattened leech shaped, oval. Trench B5, layer (5). Plate XLIV.
32. 2428. (type Misc.) Glass, translucent: disc-shaped with two perforated projections on one side, like a button; incised stag in running posture on the other. Trench D1, layer (8). Plate XLVI.
33. 1661. (type Misc.) Opal: foliated bead. Trench D1, layer (5-b.) Plate XLIV.
34. 3100. (type Misc.) Glass, transparent: disc-shaped with one side concave having incised petalled flower in a vase. Probably seal mould. Trench J8', layer (2). Plate XLVI.
35. 2469. (type Misc.) Lapis-lazuli: bird shaped bead, pierced diagonally. Trench C3, layer (1). Plate XLVI.

36. 3446. (Misc.) Crystal: tiger shaped bead. Trench A9', layer (5). Plate XLVI.
37. 2704. (Misc.) Faience, pale green: Frog shaped bead. Trench D1.C1 BK, layer (5-b). Plate XLVI.

GROUP (B) — BEADS OF ORDINARY STONES.

This group is represented by fifteen beads (or most probably spindle whorls) distributed all over equally, except in the Middle Kushana level where half of their total number was found. Greyish soapstone and dark grey schist are the materials employed for their manufacture. Typologically they are classified as follows:

- Type: (i) Lug collared
 (ii) Barrel disc.
 (iii) Convex cone with grooved base.
 (iv) Miscellaneous.

ILLUSTRATIONS

38. 2979. (type i) Greyish soapstone: conical, lug collared with two central grooves; turned and polished. Trench A6' layer (3). Plate XLV.
39. 2235. (type ii) Greyish Soapstone: barrel disc with a groove at one end. turned and polished. Trench AO, layer (4). Plate XLV.
40. 1569. (type iii) Dark grey schist: Convex cone, grooved base with two incised central lines. Trench C0, layer (4). Plate XLV.
41. 1384. (Misc.) Grey soapstone: pot-shaped with pronounced neck and incised concentric lines of decoration. Trench D1, layer (4-a). Plate XLV.
42. 1866. (Misc.) Grey Soapstone: curiously shaped piece of stone - possibly cut to resemble a tooth. Pierced from two directions. Trench C0, layer (3). Plate XLV.

GROUP (C) — TERRACOTTA BEADS

Among the personal ornaments, terracotta beads, being more economical, appear to be most frequent at all levels with major concentration in the Middle Kushana level. The total number of these beads is two hundred and sixty three. Typologically they are classified as follows: Type (i) collared at both ends; (ii) collared at one end; (iii) cogged or notched band; (iv) biconical truncated; (v) ridged biconical; (vi) convex cone, grooved base; (vii) convex cone flat base; (viii) spherical; (ix) disc barrel and miscellaneous. The following chart shows their typological distribution.

DISTRIBUTION CHART

	<i>Late Kushana</i>	<i>Middle Kushana</i>	<i>Early Kushana</i>	<i>Scytho- Parthian</i>	<i>Greek level</i>	<i>Early Greek</i>	<i>Total</i>
Collared at both ends	1	3	1	7	3	—	15
Collared at one end	2	21	12	7	—	—	42
Cogged	—	3	4	3	1	—	11
Biconical Truncated	1	9	3	4	2	—	19
Ridged Biconical	1	19	7	3	6	1	37
Convex cone grooved base	9	64	7	4	—	—	84
Convex cone flat base	1	23	6	1	1	—	32
Spherical	—	2	2	1	—	1	6
Disc Barrel	1	9	3	1	—	—	14
Miscellaneous	2	1	—	—	—	—	3
Total	18	154	45	31	13	2	263

Again, Kushana level has yielded more than three-fourths of the total number of terracotta beads. Most of the beads are turned on wheel and provided with black or pink slip; whereas others are not only hand-made but also comparatively bulky suggesting a purpose other than ornamentation. Most probably these are net sinkers. The decoration consists of incised lines in groups, horizontal striations, incised leaf patterns or pin holes scattered irregularly.

ILLUSTRATION

43. 4260. (type i) Pinkish; collared at both ends with horizontal strokes on central ridge. Trench A10', layer (8). Plate XLV.
44. 3904. (type i) Greyish; collared at both ends with central ridge flanked by incised lotus leaf pattern. Trench A7', layer (5). Plate XLV.
45. 3977. (type i) Light grey; collared at both ends with groups of zigzags flanking the central ridge. Trench A9', layer (6). Plate XLV.
46. 3474. (type ii) Pinkish red; flat based with heavy collar at one end; plain. Trench A8', layer (4). Plate XLV.
47. 1403. (type ii) Pinkish; flat based with inconspicuous collar at one end. Trench A3, layer (2). Plate XLV.

48. 2747. (type ii variant) Dark grey; heavy collar at one end with convex cone at the other. Coated with black slip Trench A5 layer (2). Plate XLV.
49. 3024. (type iii) Greyish; biconical with central band boldly notched and flanked by irregular pin hole decoration. Trench A11', layer (2). Plate XLV.
50. 2889. (type iii) Pinkish red; biconical with notched central band. Trench A4, layer (2). Plate XLV.
51. 3489. (type iv) Dark grey; truncated biconical, coated with black slip: plain. Trench A8', layer (2). Plate XLV.
52. 2104. (type iv) Pinkish; truncated biconical with deep groove around the axial perforation at both ends. Central ridge flanked by groups of incised lines. Trench A1/A0 BK, layer (6). Plate XLV.
53. 4312. (type v) Greyish; ridged biconical having irregular pin-hole decoration all over. Trench K9', layer (8). Plate XLV.
54. 3367. (type v) Pinkish; ridged biconical with worn off surface. Trench K9', layer (2). Plate XLV.
55. 1019. (type vi) Dark grey; short convex cone with a groove around the axial hole; coated with black slip. Trench D0, layer (5). Plate XLV.
56. 2925. (type vi) Black; short convex cone with a groove around the axial hole. Turned and coated with black slip. Trench A3', layer (1). Plate XLV.
57. 1344. (type vii) Greyish; short convex cone with flat base. Turned and coated with black slip. Trench D0, layer (5-a). Plate XLV.
58. 3937. (type vii) Black, short convex cone with flat base, decorated with incised line. Turned and coated with black slip. Trench J (11), layer 3. Plate XLV.
59. 3412. (type viii) Pinkish; spherical, plain, Trench J10', layer (3). Plate XLV.
60. 3997. (type viii) Pinkish; roughly spherical; stamped with a plant impression. Trench A 11', layer (5). Plate XLV.
61. 4125. (type ix) Black; disc barrel; coated with black slip. Trench K9', layer (7). Plate XLV.
62. 3421. (type ix) Greyish; disc barrel, plain. Trench A 10', layer (4). Plate XLV.

2. BANGLES

Next in order of frequency to the beads at Shaikhan Dheri come two hundred and sixty eight bangles, although in a fragmentary condition with one exception. Out of this large number copper is represented by one whereas conch

shell and glass account for two hundred and twelve and fifty specimens respectively. Among the various kinds of shells which have been found in the excavations in an uncut condition *Zancus pyrum* invites special attention as it served as a favourable material for the manufacture of bangles. Two specimens of this shell were found in a condition preparatory to bangle making — the conical ends and columella having been removed, suggesting a local industry. The largest number of these bangles come from the Kushana levels, standing in marked contrast to the five specimens found at the Scytho-Parthian and Greek horizons. However, glass has a different story to tell and fragments of bangles made of glass are three times larger in number than those of shell in the pre-Kushana layers.

The different shapes of bangles appear to have been largely conditioned by the shape of the shell used for their manufacture. Normally the shell bangles are plain, being either oblong, rectangular, spherical or occasionally elliptical in section, usually flat from within. As regards size, they vary from three to one and a half inches in diameter. Similar shapes were produced in blue or greenish glass as well: occasionally with a coating of dim chocolate colour.

Selected specimens of shell bangles with varying ornamental motifs, both in low relief and simple incision, are illustrated below.

1. 649. Shell bangle (fragment): almost rectangular in section; decorated with over-lapping scale patterns on the outer face in relief. Fine hatching on both sides. Yellowish colour. Trench E1, layer (4). Plate XLIX.
2. 3567. Similar: Squarish in section with incised parallel lines running on the outer face. Dull white. Trench J 10', layer (2). Plate XLIX.
3. 1237. Similar: rectangular in section, with rosette patterns (the ones with rounded petals alternating with those having conical petals) sunk on the outer face for inlay. Whitish in colour. Trench D1, layer (5) Plate XLIX.
4. 643. Similar: squarish in section; cable pattern carved in low relief on the outer face. Yellowish in colour. Trench E1, layer (4). Plate XLIX.
5. 745. Similar: with a projecting flange on either side of the outer face. Whitish in colour. Trench A0, layer (2). Plate XLIX.
6. 667. Similar: Rectangular in section, with beaded outer face. Whitish in colour. Trench B1, layer (3). Plate XLIX.
7. 291. Similar: with two raised ridges running parallel on the outer face. Yellowish in colour. Trench B0, layer (3). Plate XLIX.
8. 838. Similar: with beaded outer face; the beads being bisected each by an incised horizontal line, and separated from each other by hollows. whitish in colour. Trench F0, layer (4.) Plate XLIX.
9. 2338. Similar: with outer face divided into zones, each by two parallel raised lines, with a conventionalised bird carved in relief. Coated grey. Trench C5, layer (1). Plate XLIX.

3. FINGER RINGS. (made of copper, iron, shell)

Out of the twenty three finger rings copper accounts for thirteen, iron for eight, and silver and shell each for one. The Scytho-Parthian level is represented by five specimens — four of iron and one of shell; the others come from layers belonging to the Kushana period. Typologically, they can be classified into five types:

- (i) Of plain rounded wire (these are five in number and all belong to the Kushana period).
- (ii) With plain bezel-both flat and raised. (these are eleven in number and are distributed in the Scytho-Parthian to the late Kushana levels).
- (iii) With both bezel and hoop decorated (only one).
- (iv) With simple bezel and decorated hoop (only one).
- (v) With a cavity in the bezel for gemstone and simple hoop.

All of them come from the Kushana levels. Selected specimens are illustrated below:

- 10. 3925. (type i). Iron: plain rounded wire. Trench A7', layer (5). Plate XLIX.
- 11. 1193. (type ii) Copper: raised square bezel: hammered out of a thick wire: plain hoop round in section. Trench C1, layer (3). Plate XLIX.
- 12. 3381. (type ii) Iron: flat bezel; hammered out of a thick wire; plain hoop round in section. Trench A5', layer (3). Plate XLIX.
- 13. 3178. (type ii, variant) Silver: raised rounded bezel with a gemstone (carnelian) intact, having a beaded border all round. Flat simple hoop soldered with bezel. Trench A8', layer (3). Plate XLIX.
- 14. 301. (type iii) Lapis lazuli: bezel in the shape of a lion head; beaded outer face, flat from within. Trench B1, layer (3). Plate XLVI.
- 15. 4051. (type iv) Shell: raised elliptical bezel; hoop decorated with incised fish head design placed in between bands of horizontal lines on the outer face, flat from within. Trench I 11', layer (6). Plate XLVI.
- 16. 3667. (type v) Copper: plain bezel with a depression for gemstone or paste. Trench A 2', layer (5). Plate XLIX.

4. HAIR-PINS AND STOPPERS

Of the three hair-pins of copper only one comes from the Scytho-Parthian level. The others belong to the Kushana period. There is only one stopper made of copper. The heads of the four specimens mentioned above are invariably decorated with moulded animal figurines. The hump of one of the animals (No. 4245) appears to have been damaged while still in use and, by mistake, was soldered upon the neck.

ILLUSTRATIONS

17. 1771. Copper: hair-pin with a peacock on the top, Trench B4, (2). Plate XLIX.
18. 1689. Copper: hairpin with a moulded bull head on the top: actual rod of the hair pin is completely missing. Trench B3, layer (3.) Plate XLIX.
19. 4245. Copper: Stopper for an antimony phial, with a bull figurine standing at a rectangular platform on the top. Trench A8', layer (6). Plate XLIX.

5. MIRROR

Only one copper mirror was found in the excavation. It is illustrated below:

3. 4024. Copper: flat circular mirror: diameter four inches. Its face is almost flat with a broad raised rim at the back. There is a small projection on the edge with three iron rivets for holding the handle which is completely missing. Trench A' (4), Pl. La.

6. ANTIMONY RODS AND NAIL PARER

(Copper and ivory)

The total number of antimony rods is eighteen of which five come from the Greek levels, seven from the Scytho-Parthian levels and six belong to Kushana levels. Of the eighteen specimens copper accounts for fourteen, and ivory for four.

These are classified as follows:

- (i) Simple antimony rod
- (ii) Antimony rod-cum-tooth pick
- (iii) Antimony rod-cum-ear cleaner.

ILLUSTRATIONS

20. 2388. Copper: antimony rod with clubbed ends, round in section. Trench B5' C5' BK, layer (2). Plate XLIX.
7. 2161. Ivory: antimony rod for smearing antimony round the eyes. One end is round — not thickened. Trench A1', layer (6). Plate XLVIII.
4. 2587. Ivory: antimony rod; both ends rounded: plain. Trench A1, layer (17). Plate XLVIII.
21. 3382. Copper: nail parer with flattened working edge; round in section. Trench A5', layer (3). Plate XLIX.

7. COMBS

Besides antimony rods, two ivory combs were found, one of which has curved top as distinguished from the other having straight top. The teeth, though almost broken, appear to be very evenly sawn and provided with rounded tips.

ILLUSTRATIONS

1. 2255. Ivory: Comb with curved top: decorated with four incised circles. It has thirty two teeth — all broken. Trench A1/A2 BK, layer (4). Plate XLVIII.
2. 3351. Ivory: Comb with straight top and straight sides. there are thirty four teeth of which six are intact: plain. Trench A10', layer (6). Plate XLVIII.

8. GOLD ORNAMENTS

The excavations yielded a few gold ornaments. There are seventeen specimens representing gold, found in the Scytho-Parthian and Kushana levels. They mainly consist of small non-descript fragments, small round plates impressed with flower pattern, an ear ring, a leaf shaped gold pendant and a bead. These are illustrated below:

22. 4331. Gold: ear ring: gold plaited copper wire with a circular fluted bead at the point where the two ends join. It has an indented outer face. Trench A11', layer (3). Plate XLIX.
23. 734. Gold: leaf shaped pendant with a soldered loop for suspension. Trench A0, layer No. 3. Plate XLIX.
24. 3615. Gold: Cylinder circular bead: plain. Trench A7, layer (3) Plate XLIX.

13. THE POTTERY

Contributed by Mr. Fidaullah

There is a great abundance of pottery found in the excavations. We have also recovered groups of complete pots in some of the occupation strata. Tall storage jars have also been found in complete shape and form. It was rather very difficult to make a selection out of the huge lot. In our workshop the whole pottery was laid on the floor periodwise and classification was made on the basis of form and ware. But in the drawings presented here it was not possible to include all the forms of the different periods. While the Greek period forms are completely represented, the surviving forms in the later periods have been generally omitted. But all the new forms have been included in the drawings. We have followed the method of Sir Mortimer Wheeler in our description in so far as the catalogue is given under different periods. The main idea is to carry further the chronological story of the pot forms from the point where Wheeler left in his excavation report of *Charsada*. It will be seen that the story really takes our knowledge further. Significantly enough we

do not get the forms which Wheeler places between 6th and 4th centuries B.C. With the coming of the Bactrian Greeks some new forms are seen and remarkably enough "Soapy red ware" of Wheeler survived only in this period. However, with the Scytho-Parthians a new era of contact with the western world started. This contact continued in the Kushana period. As a result we get a new red ware of fine texture and along with it a number of new forms. The idea will be understood clearly in the detailed catalogue given below. On the other hand our pot forms compare fairly well with those found at Sirkap.

The Pottery may be broadly grouped under three heads:

- (A) Black Polished ware
- (B) Grey Ware and
- (C) Red or Reddish Buff Ware.

(A) BLACK POLISHED WARE

Only very few fragments of this ware have been found in our excavation. These fragments are made of well levigated clay and are highly polished both inside and outside. The firing is uniform through and through. Only one fragment is extremely thin in section while all others are medium. The shiny like polish almost resembles that seen on the Northern Black Polished ware. This polish is remarkable in the fragments in the lower levels but the polish almost disappears from the specimens recovered in the upper levels though the ware is the same. It seems that Wheeler (*Charsada*) No. 499, described as bowl of black ware, is similar to our late examples which all belong to the Kushana period. I hesitate to take them as true representatives of the Northern Black Polished ware. But it is likely that this ware is a local imitation of the former. The main form is a rimless bowl but small saucers and dishes are also seen. The fragments are catalogued below:

Fig. 10

GREEK LEVEL

1. Fragment of a bowl with incurved rim, B1 (17).
2. Fragment of a bowl with thin rim, D1 (15).
3. Fragment of a bowl with thin edge rim, D1 (12).
4. Fragment of a bowl with thick rounded rim, D1 (12).
5. Fragment of a thin black polished ware, D1 (12) (Not illustrated).
6. Piece of a carinated bowl, D1 (13) Compare *Ghosh*, fig. 4, No. 7a.
7. A small fragment, D1 (11) (Not illustrated).

SCYTHO-PARTHIAN LEVEL

8. Fragment of a bowl with rim like that of No. 2 above A9' (5).
9. Fragment of a bowl with everted rim, A7' (5).

KUSHANA LEVEL

10. Fragment of a bowl, polished on both sides A2 (5) (Not illustrated).
11. Fragment of a bowl without any polish, AO (1) Pit 1.
12. Fragment of a bowl without any polish, AO (4) (Not illustrated).
13. Fragment of a bowl without any polish, DO (5).
14. Fragment of a bowl without any polish, FO (5) (Not illustrated).

BLACK POLISHED WARE

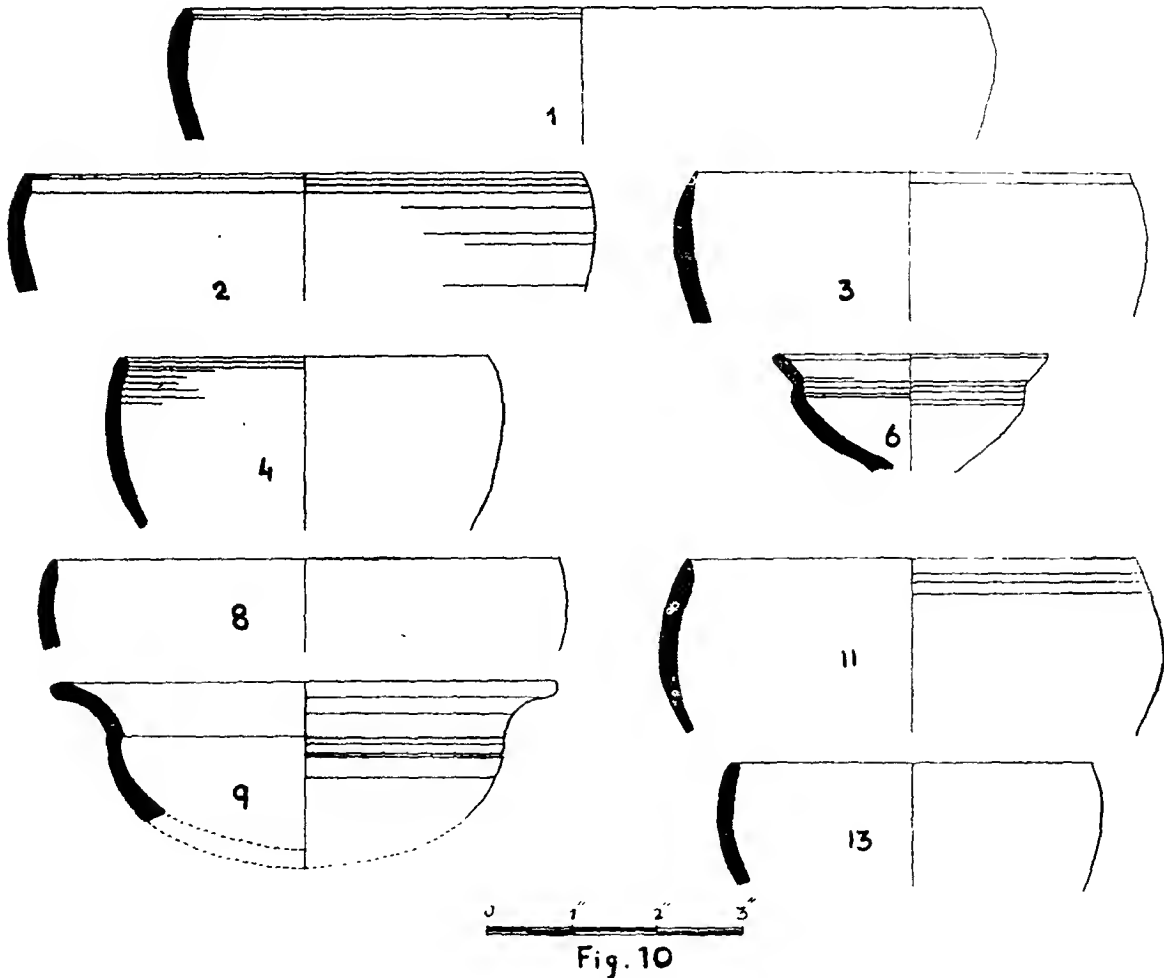


Fig. 10

(B) GREY WARE

In the Shaikhani Dheri excavation we have a distinctive group of pottery which may be called as Grey Ware. This type has been found earlier by Sir Mortimer Wheeler (see his *Charsada* Nos. 49, 50, 74, 209, 503 and 525). This ware is also noted in (Sirkap) Taxila.¹ But so far we have no knowledge

¹ A. Ghosh: Taxila (Sirkap), 1944-45 *Ancient India*, No. 4, P. 48. (hereafter referred to only by author's name)

GREEK PERIOD : GREY WARE

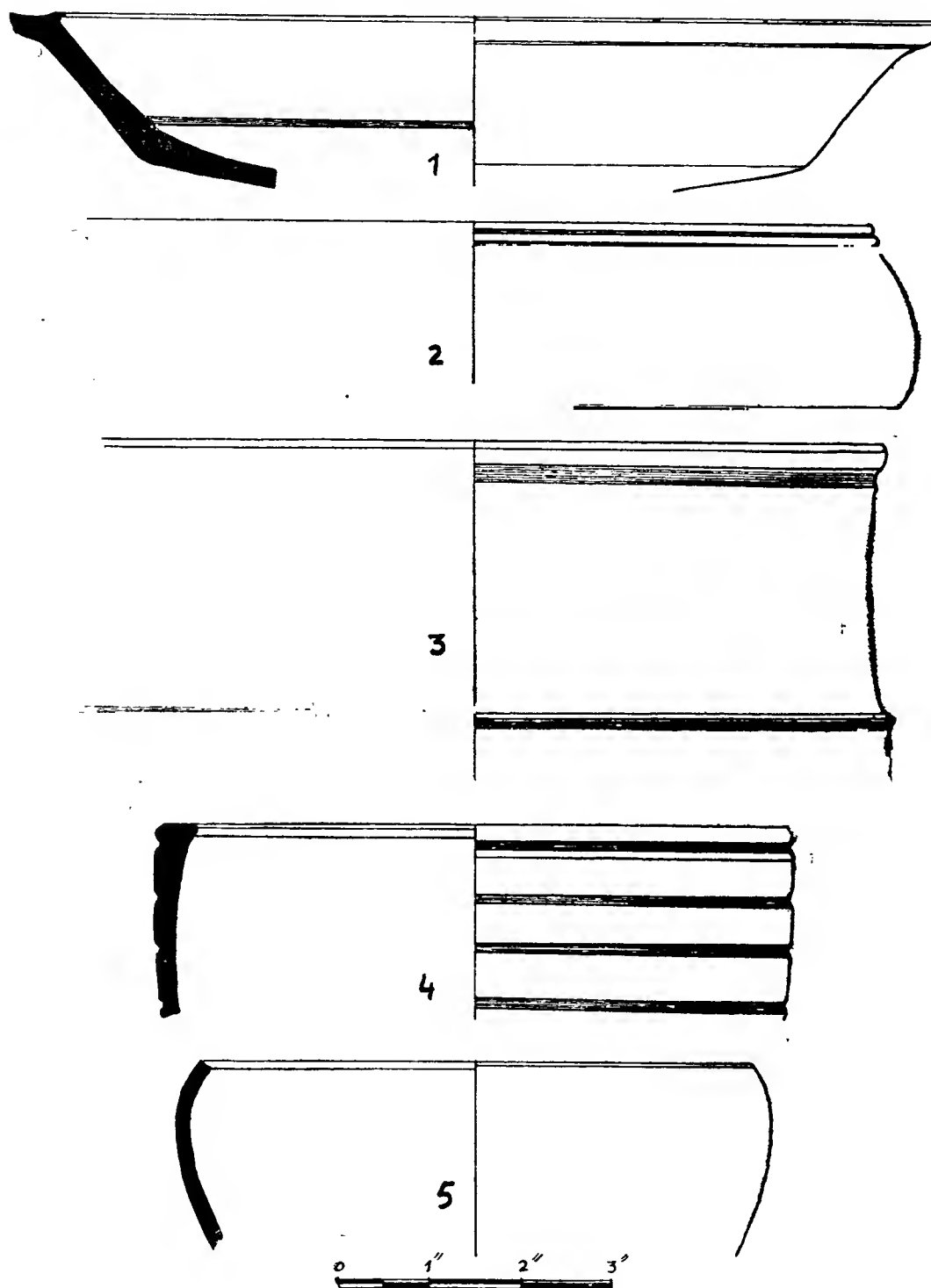


Fig. 11

about its chronological sequence. Wheeler records its occurrence from fourth-third century B.C. to second century B.C. But his finds are very few in number. If our excavation, so far done, can be generalised, we may say that the pottery in this ware is found in great number in the Greek level and Scytho-Parthian level. In the Kushana period only limited fragments survive.

It is made of fine levigated clay, very well fired showing sometimes regular darker grey bands inside as well as outside, thus giving an effect of dark and light shade. These bands appear to have been remnants of alternate light and

GREEK PERIOD GREY WARE

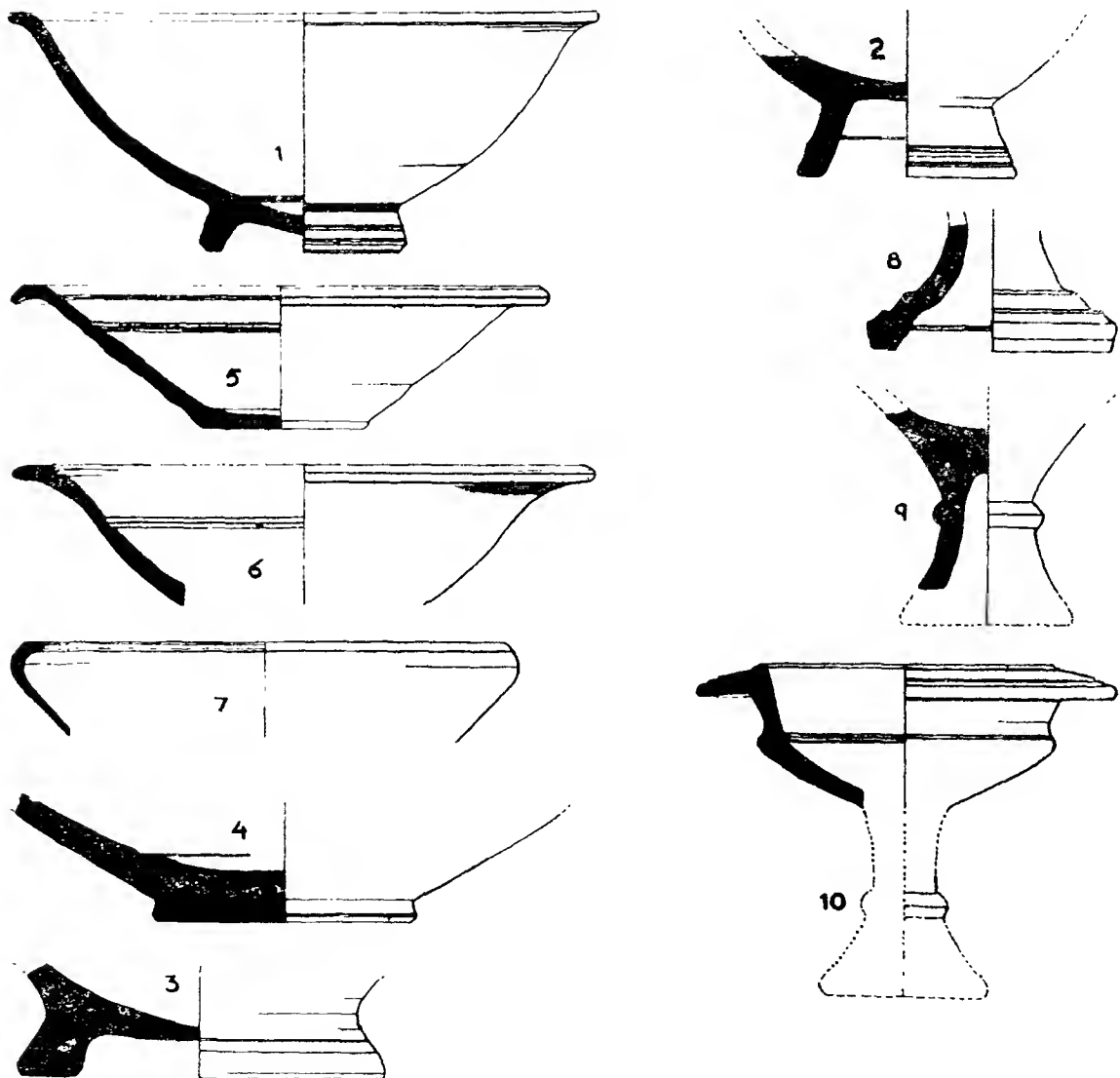


Fig. 12

GREEK PERIOD : RED WARE

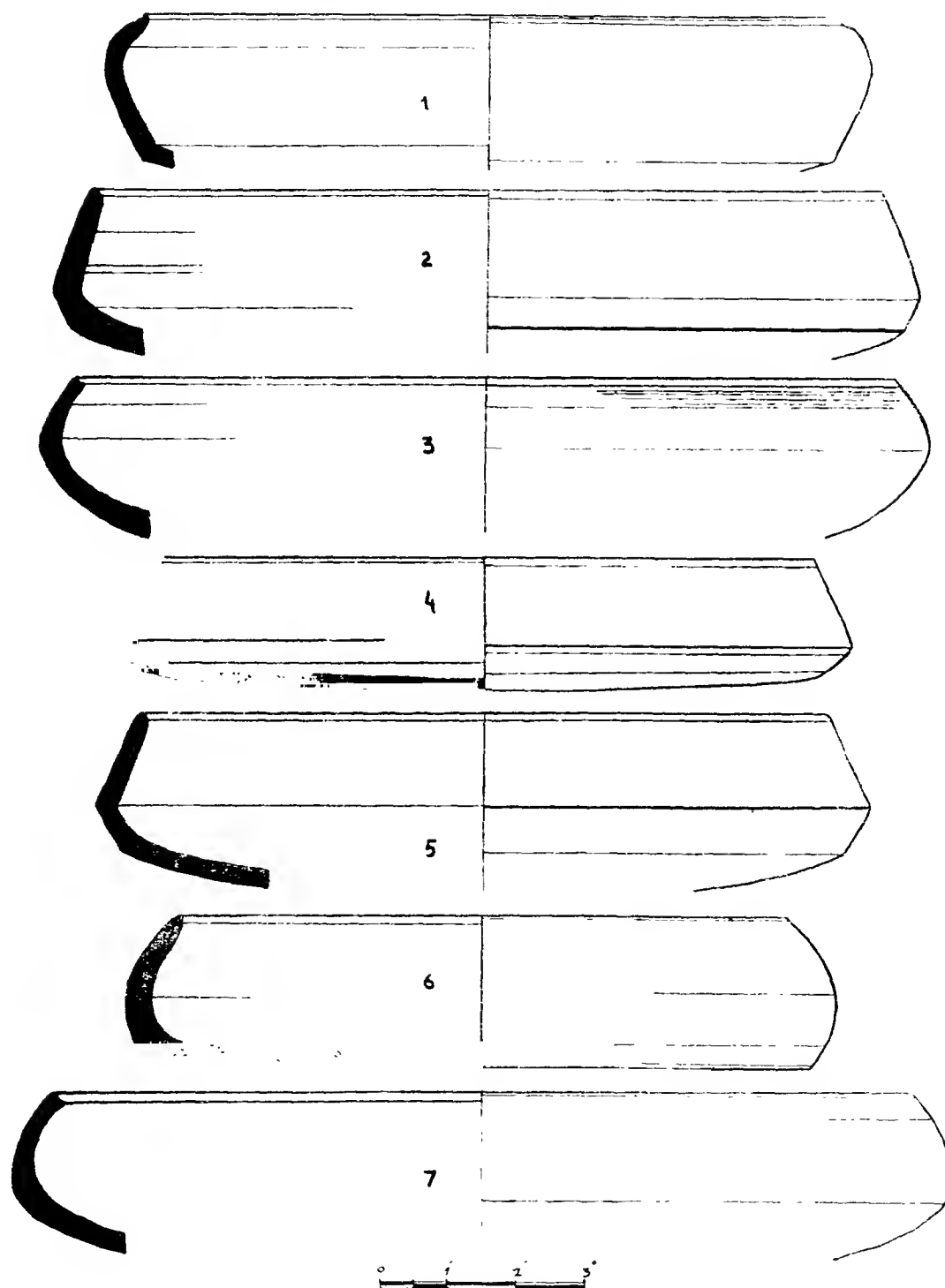


Fig. 13

GREEK PERIOD : RED WARE

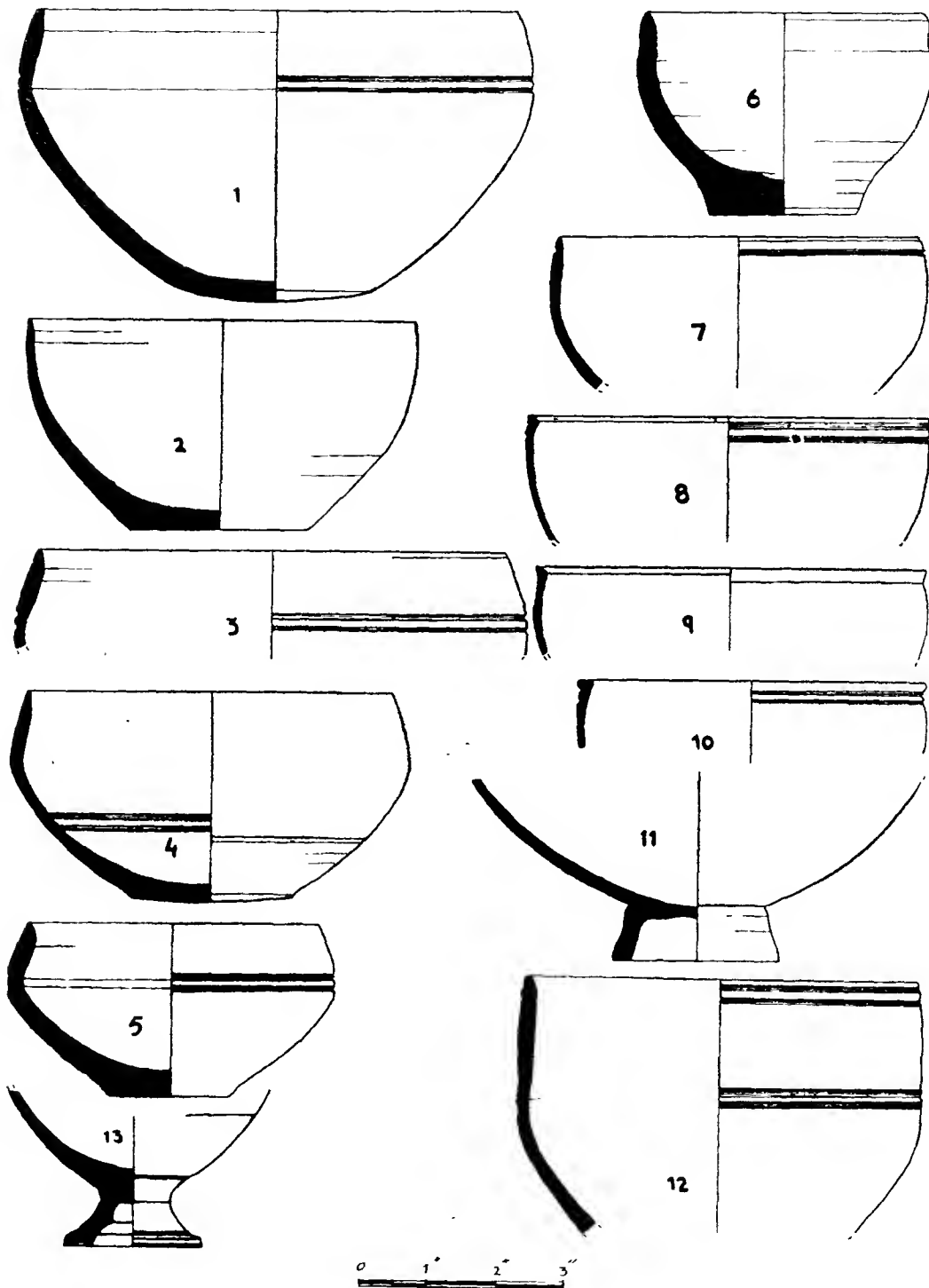
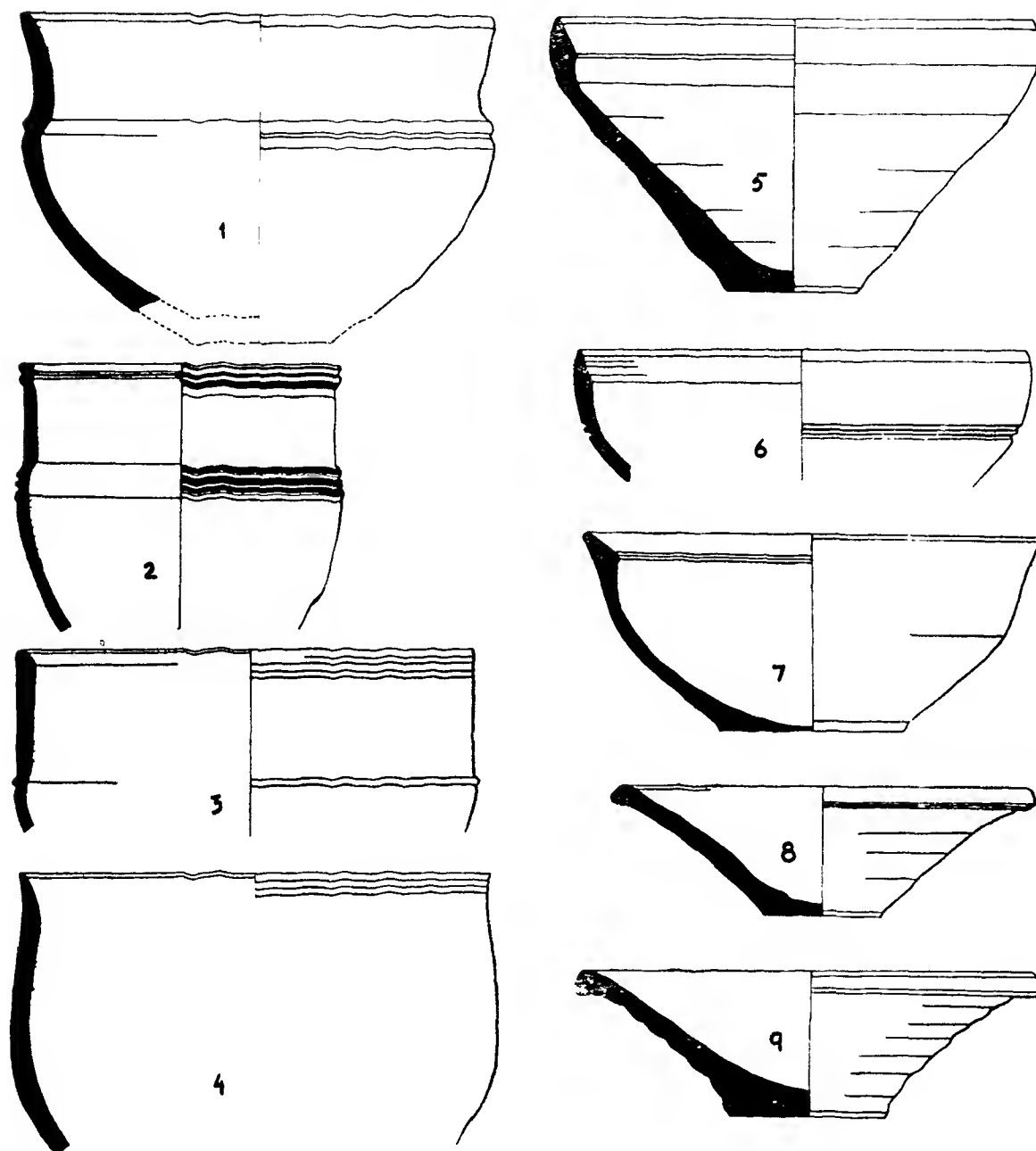


Fig. 14

GREEK PERIOD RED WARE



0 1 2 3
Fig. 15

GREEK PERIOD : RED WARE

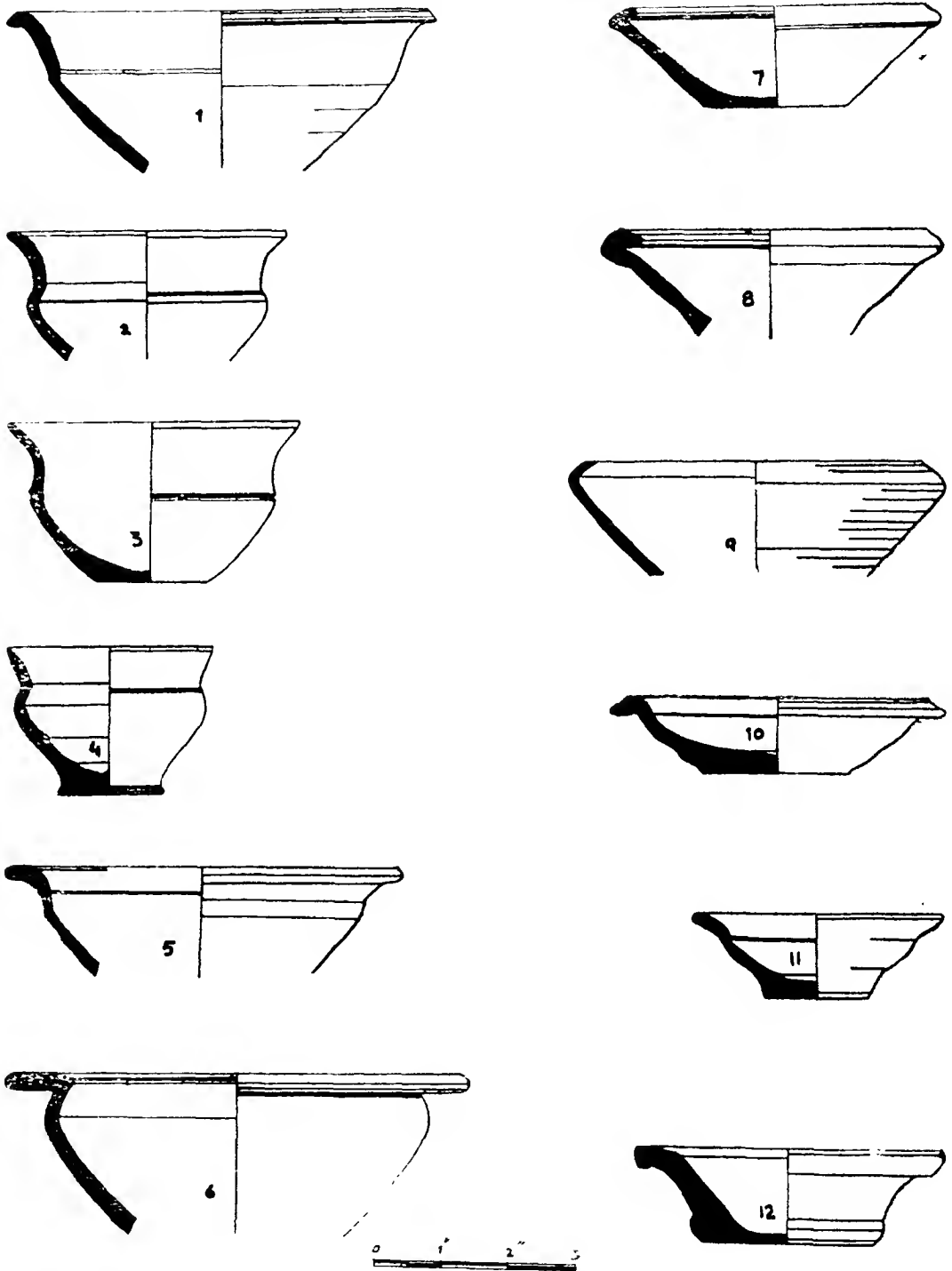


Fig. 16

GREEK PERIOD / RED WARE

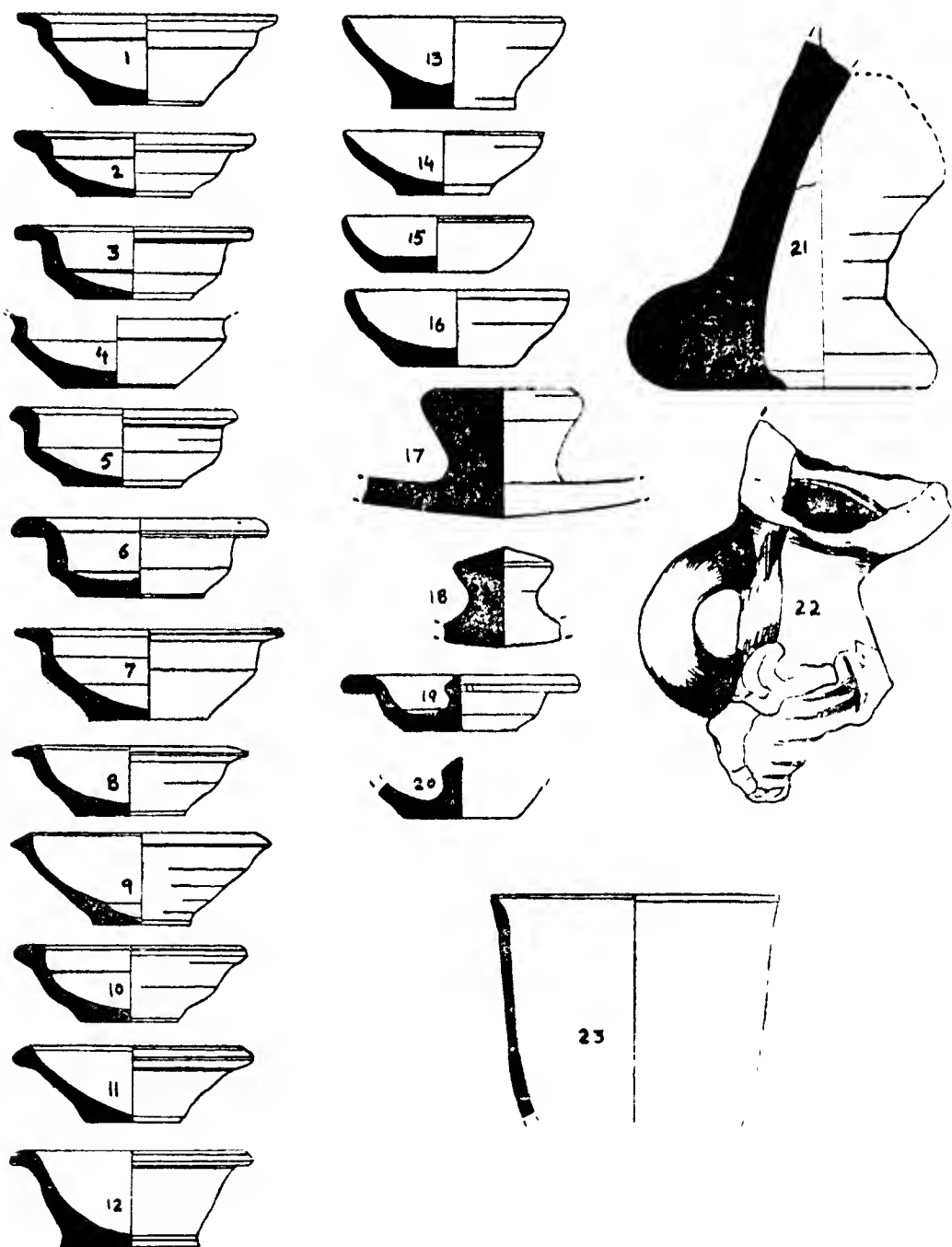
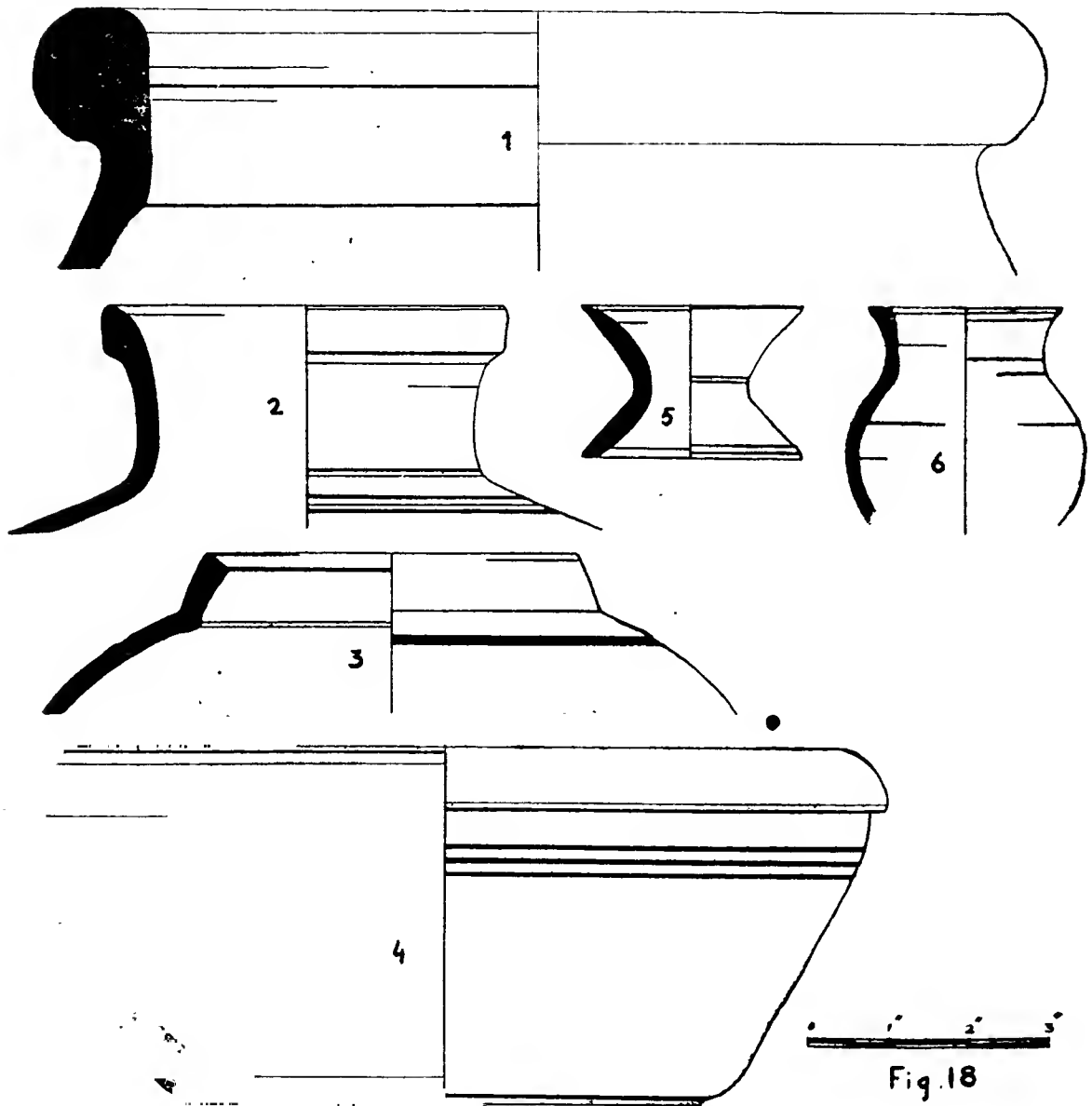


Fig. 17

heavy scouring of the pot at the time of turning it on a wheel. In the Scytho-Parthian period we also get a coarse variety of this ware in mass production. They are all shallow bowls of different sizes but poor firing has resulted in the coarser variety. The clay of this coarse type of pottery also shows more of

GREEK PERIOD RED WARE



GREEK PERIOD: RED WARE

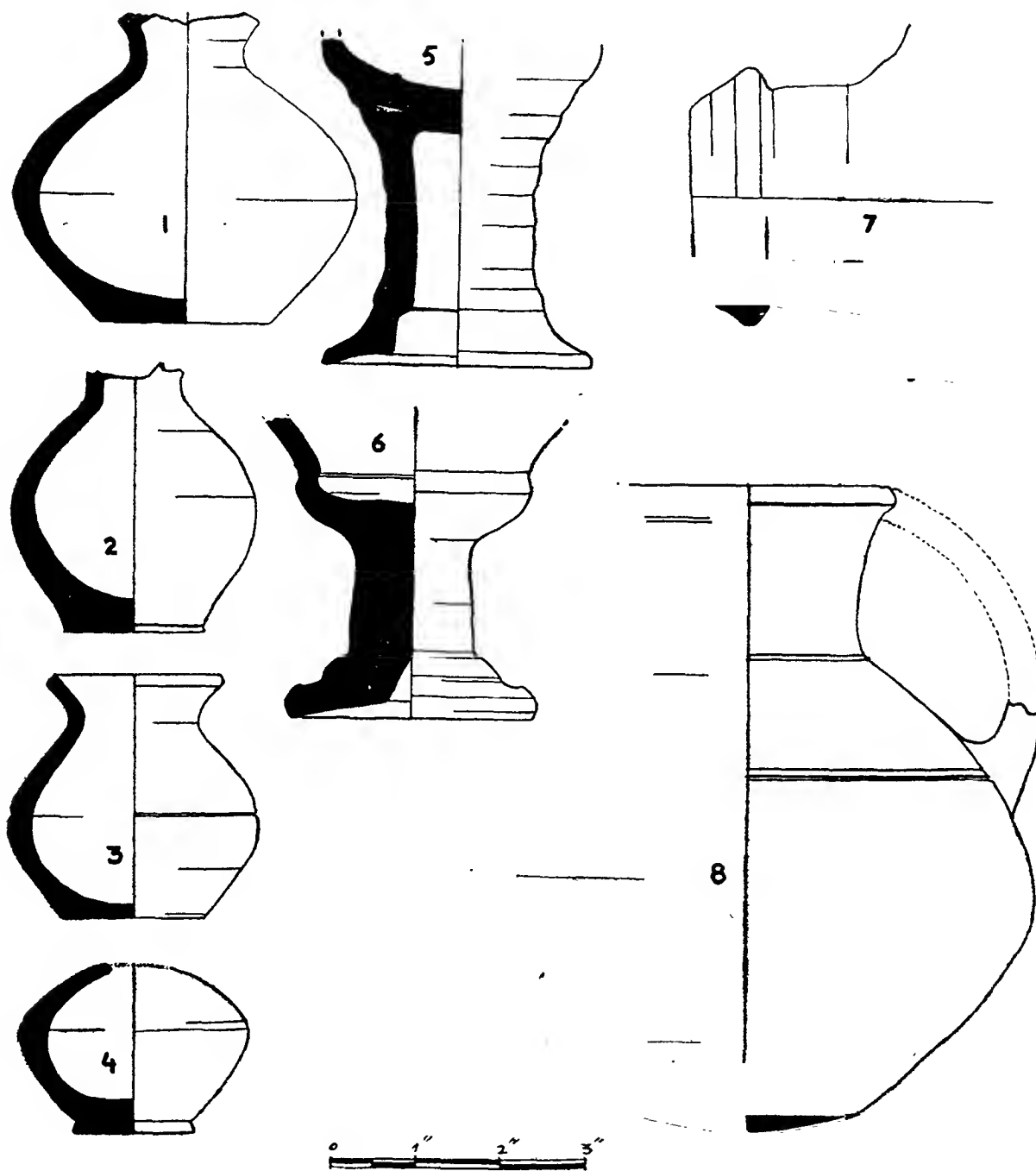


Fig. 19

GREEK PERIOD RED WARE

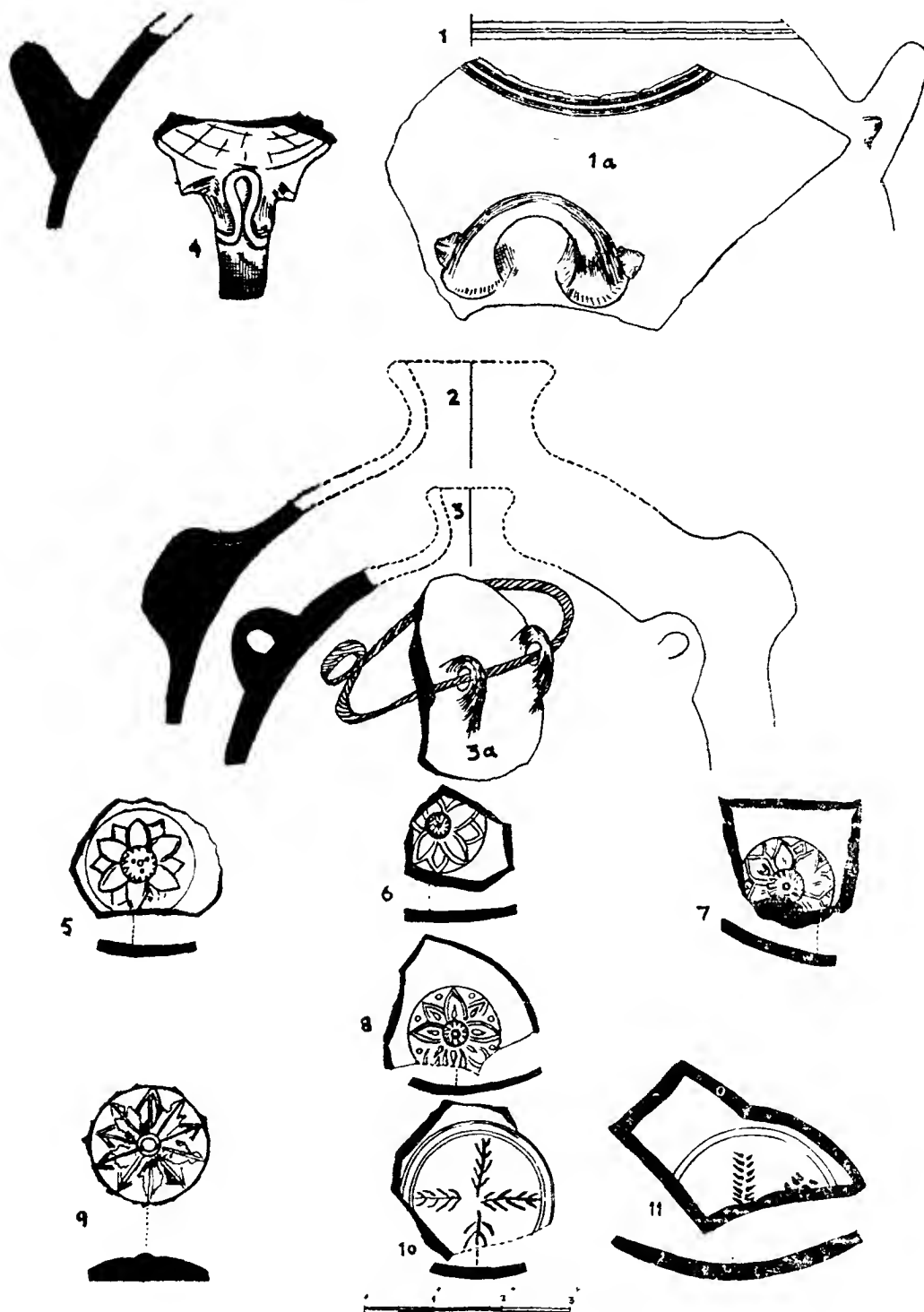


Fig. 20

GREEK PERIOD PAINTED SHERDS

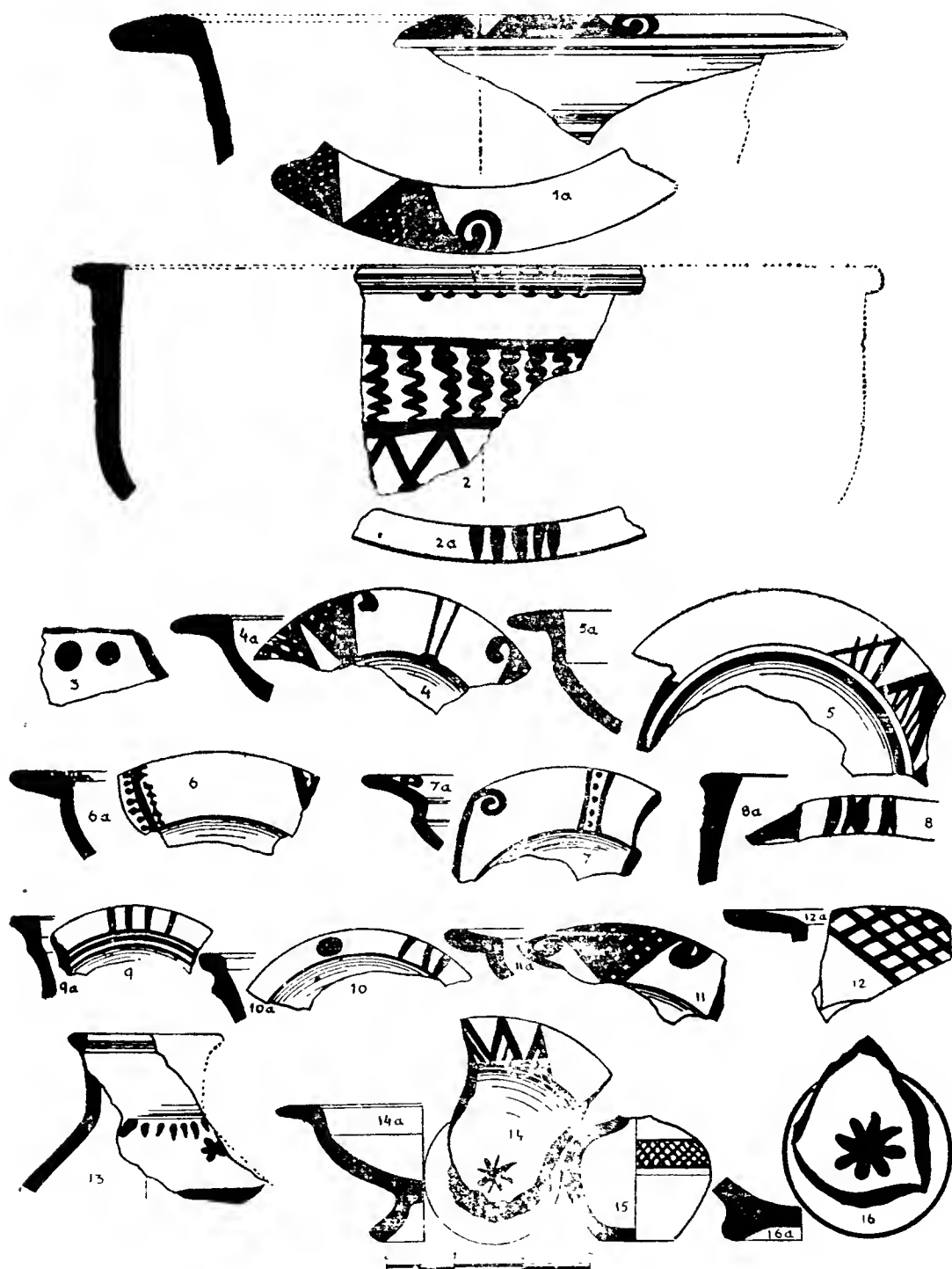


Fig. 21.

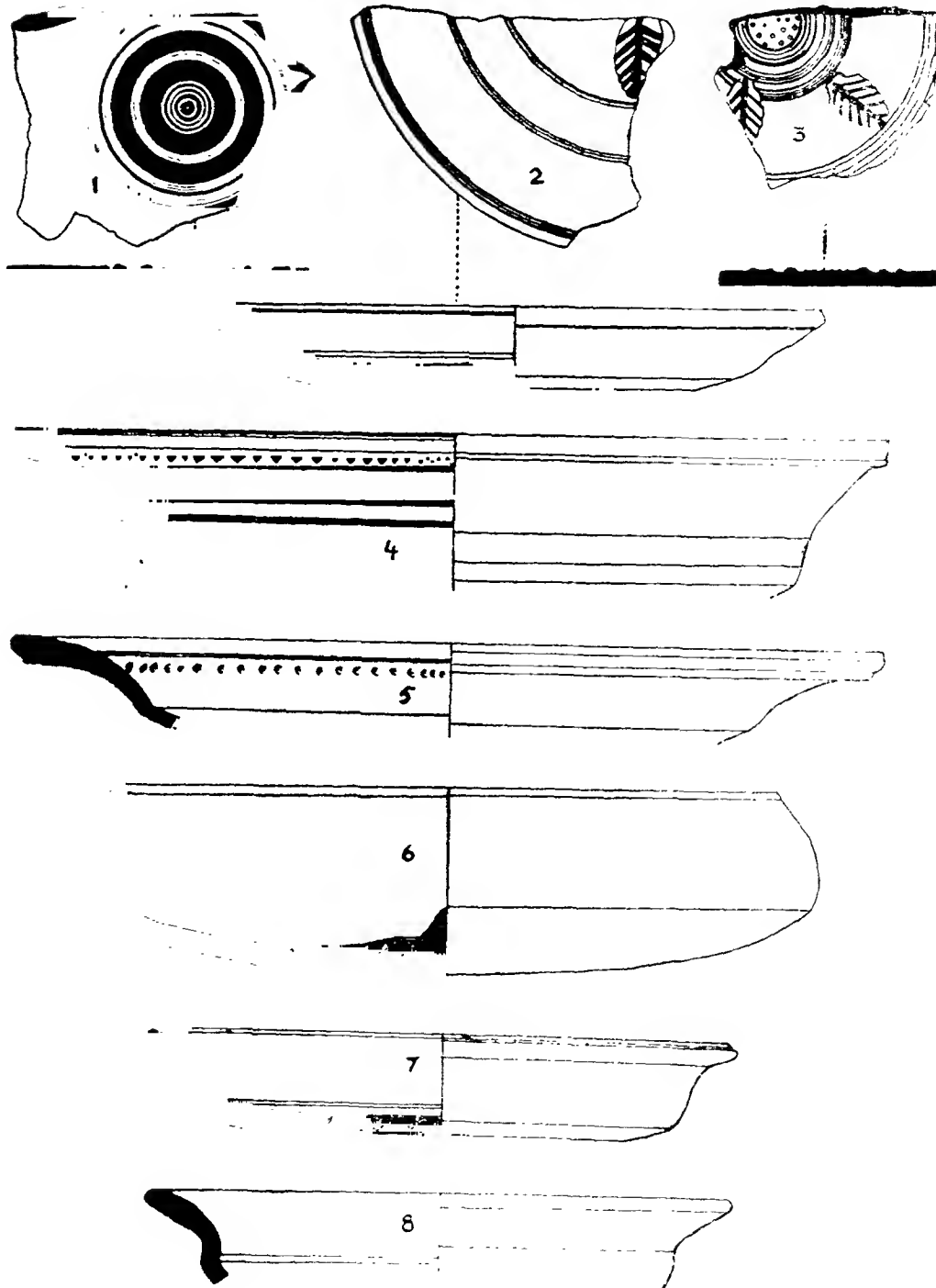
SCYTHO-PARTHIAN PERIOD
GREY WARE

Fig. 22

SCYTHO - PARTHIAN PERIOD
GREY WARE

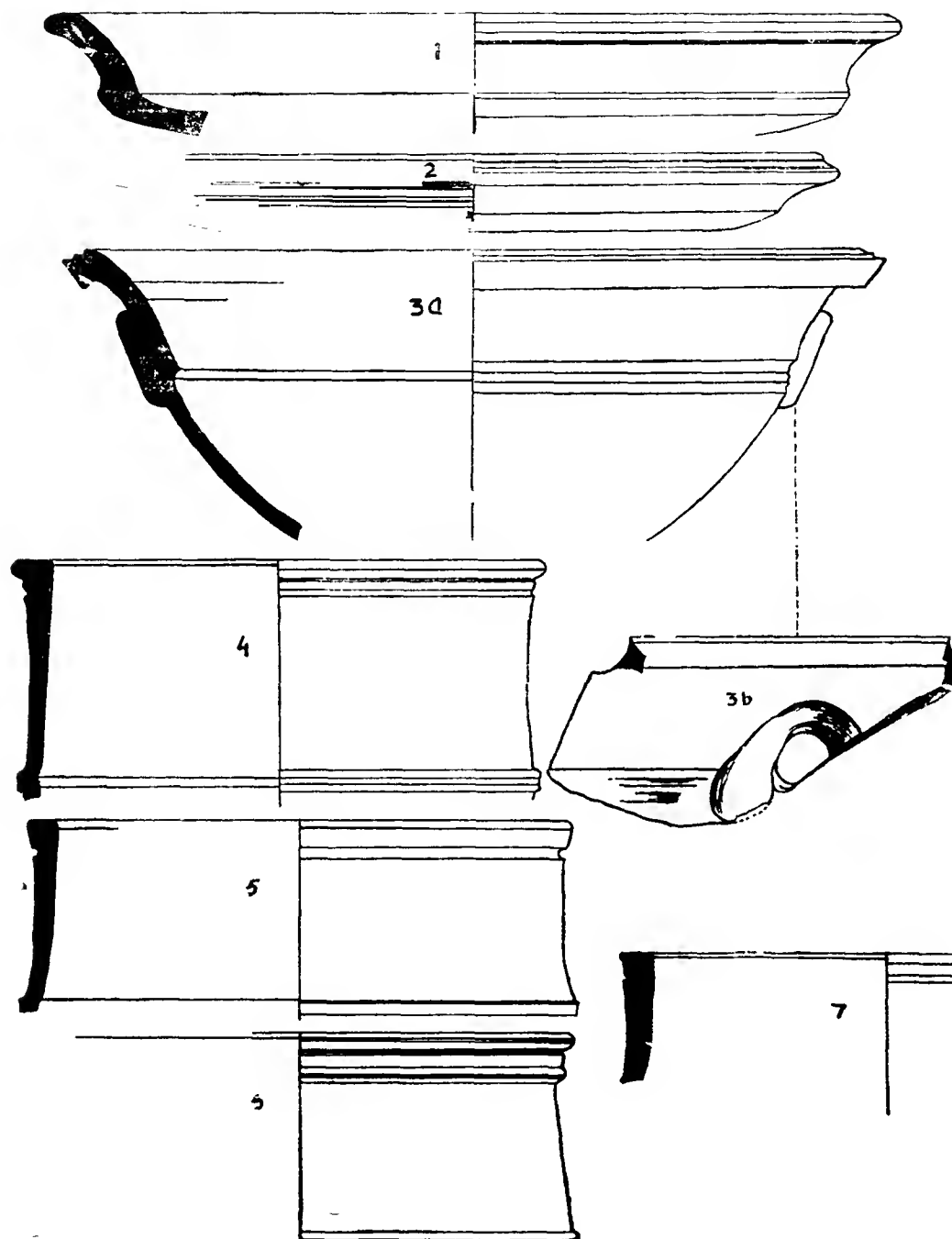


Fig. 23

SCYTHO - PARTHIAN PERIOD
GREY WARE

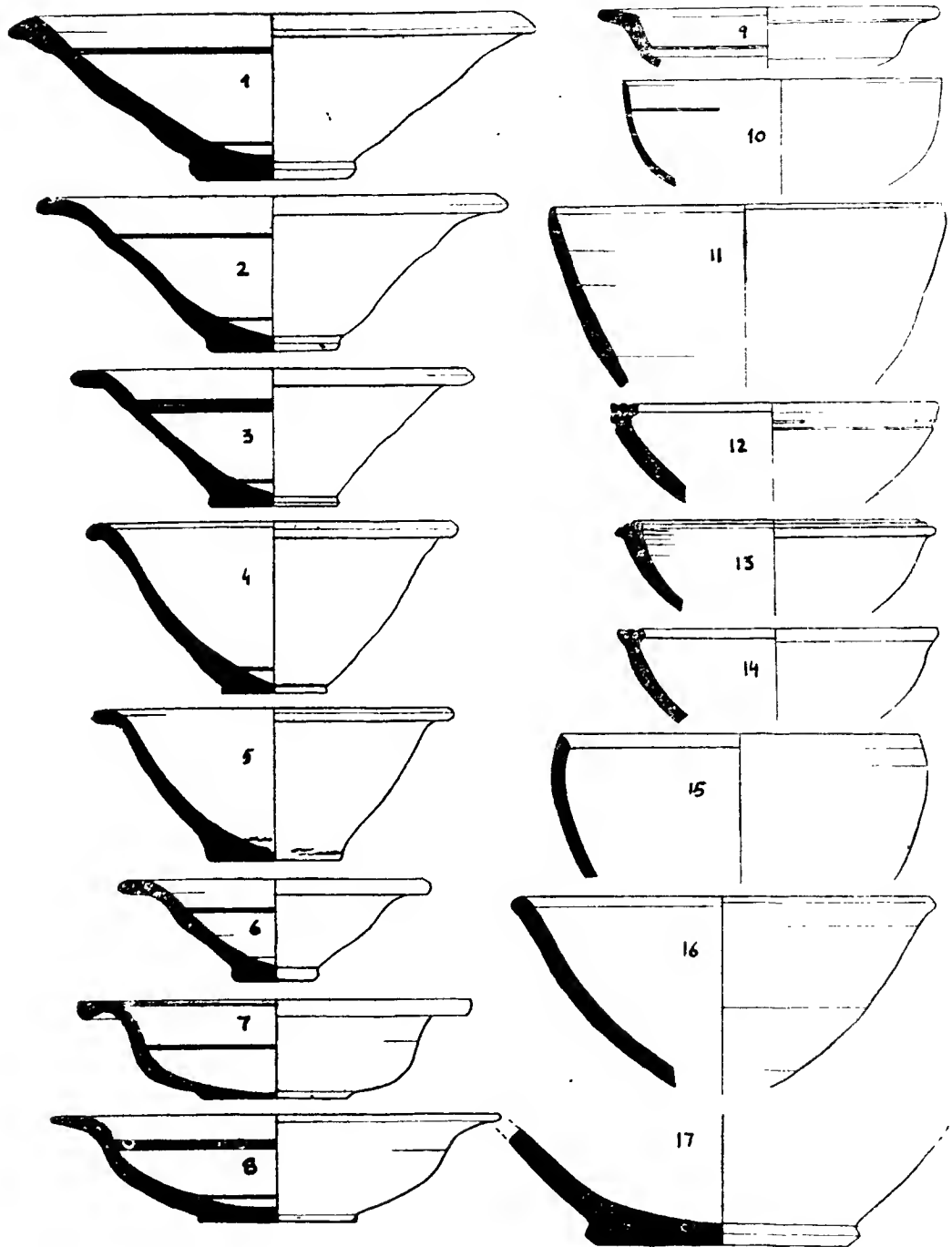
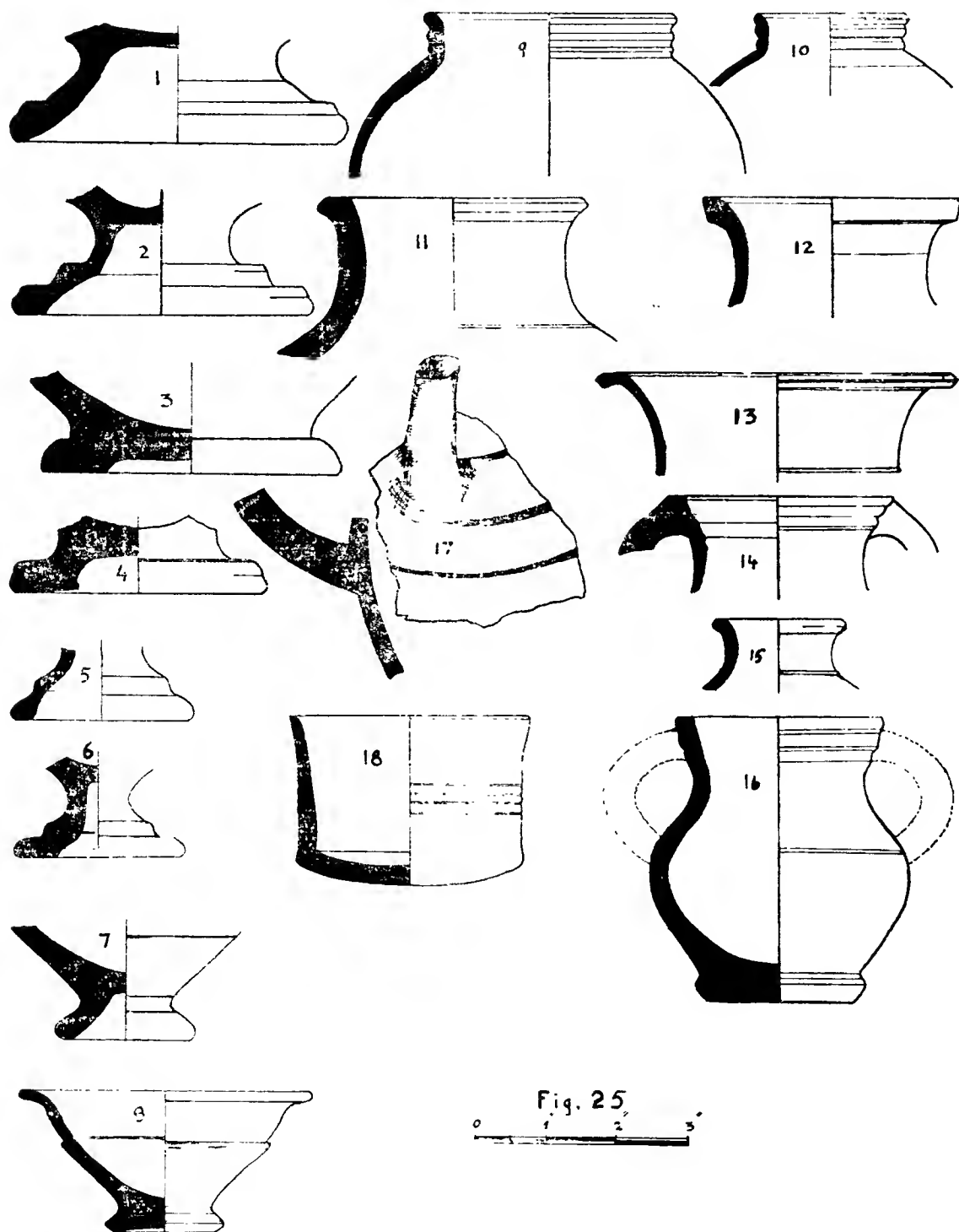


Fig 24.
2 3"

SCYTHO-PARTHIAN PERIOD
GREY WARE



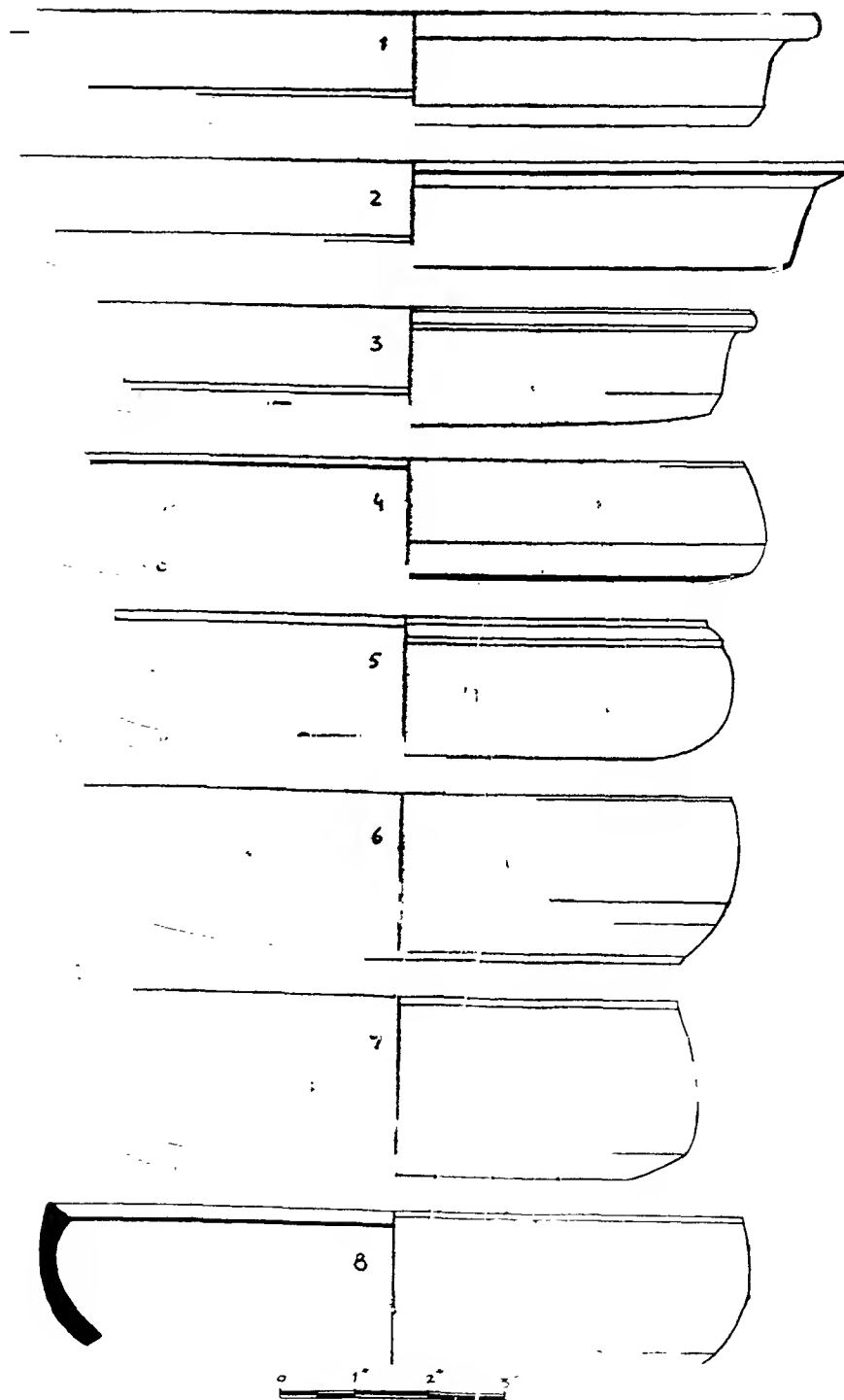
SCYTHO - PARTHIAN PERIOD
RED WARE

Fig 26

SCYTHO - PARTHIAN PERIOD
RED WARE

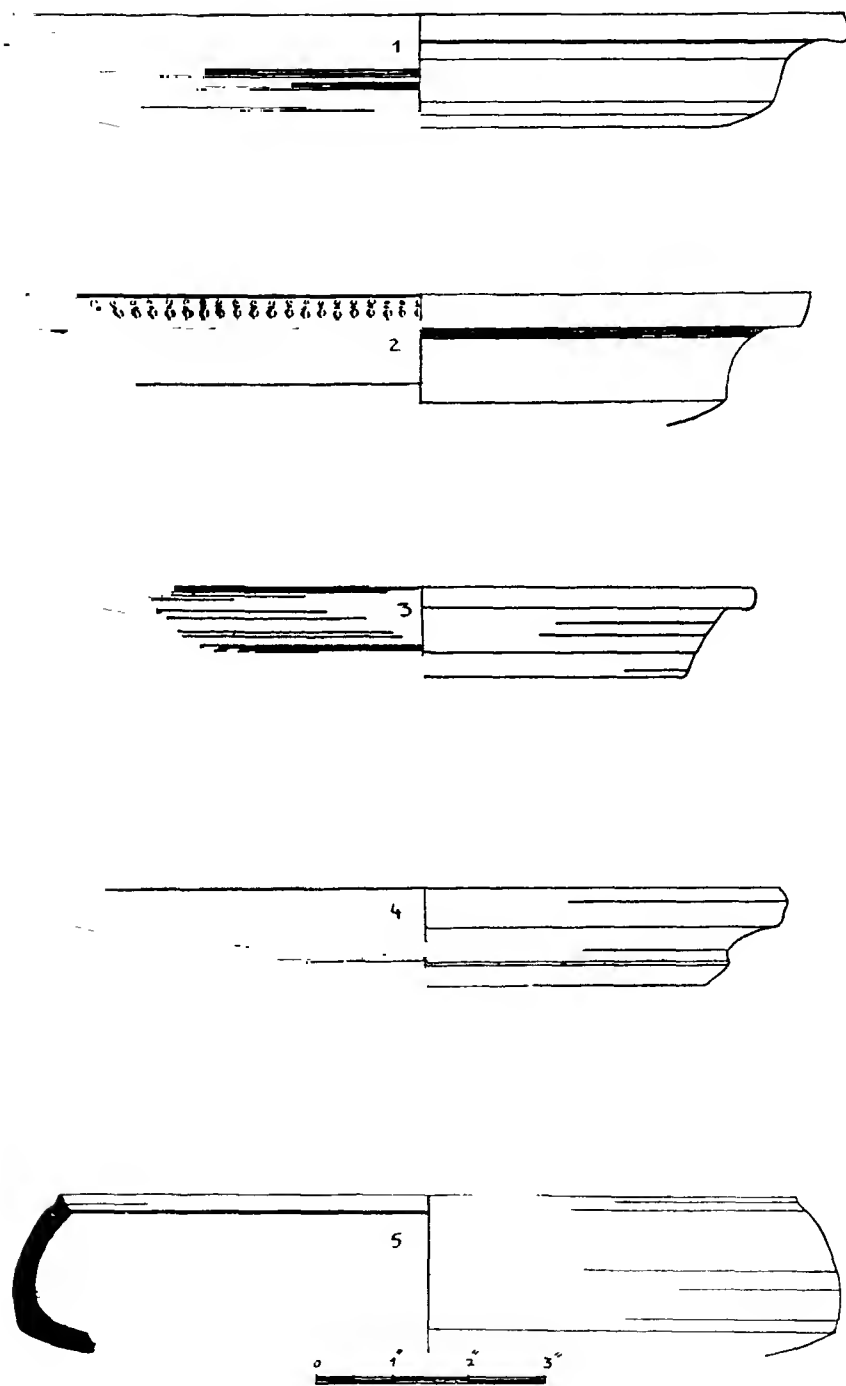


Fig. 27

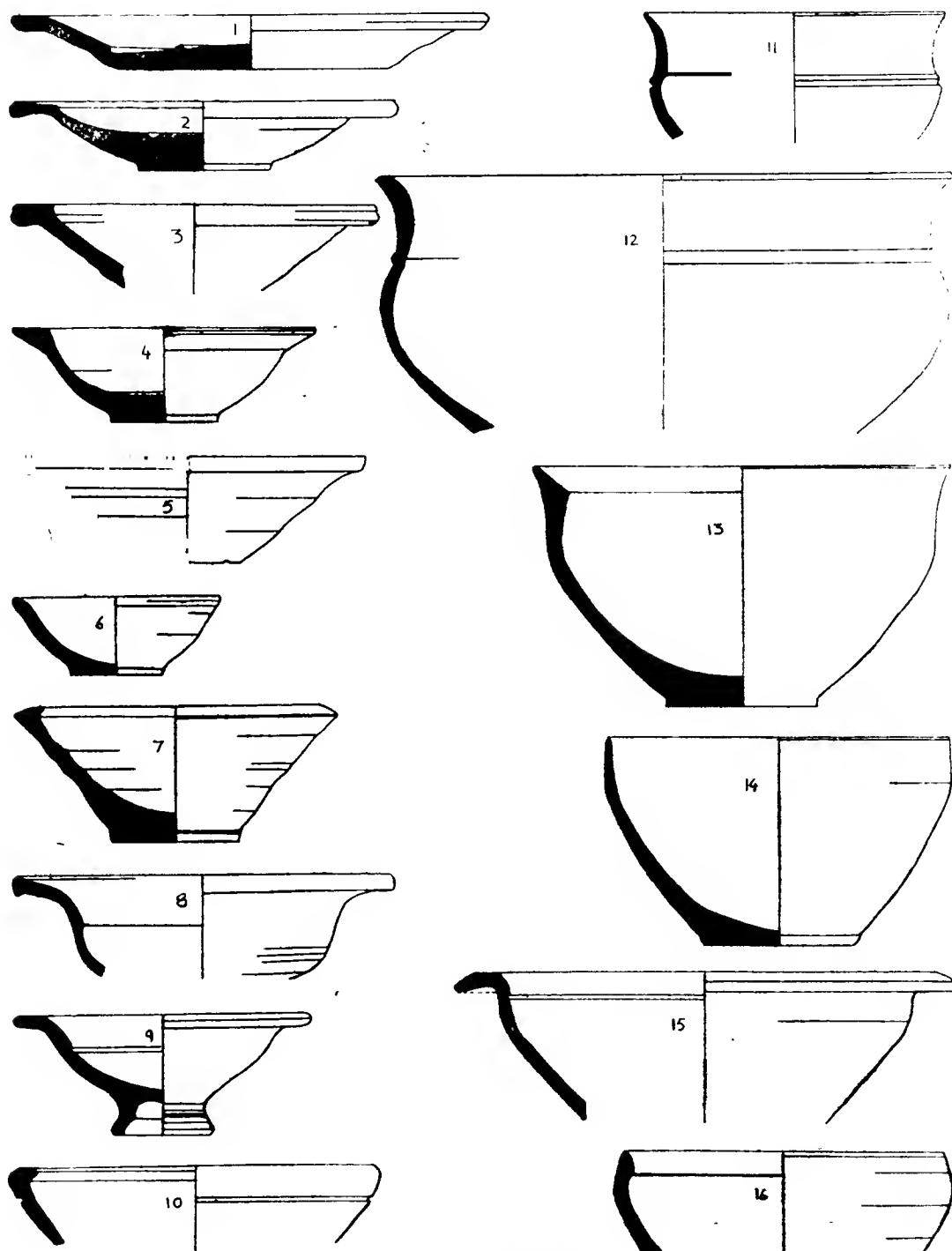
SCYTHO - PARTHIAN PERIOD
RED WARE

Fig 28

SCYTHO-PARTHIAN PERIOD
RED WARE

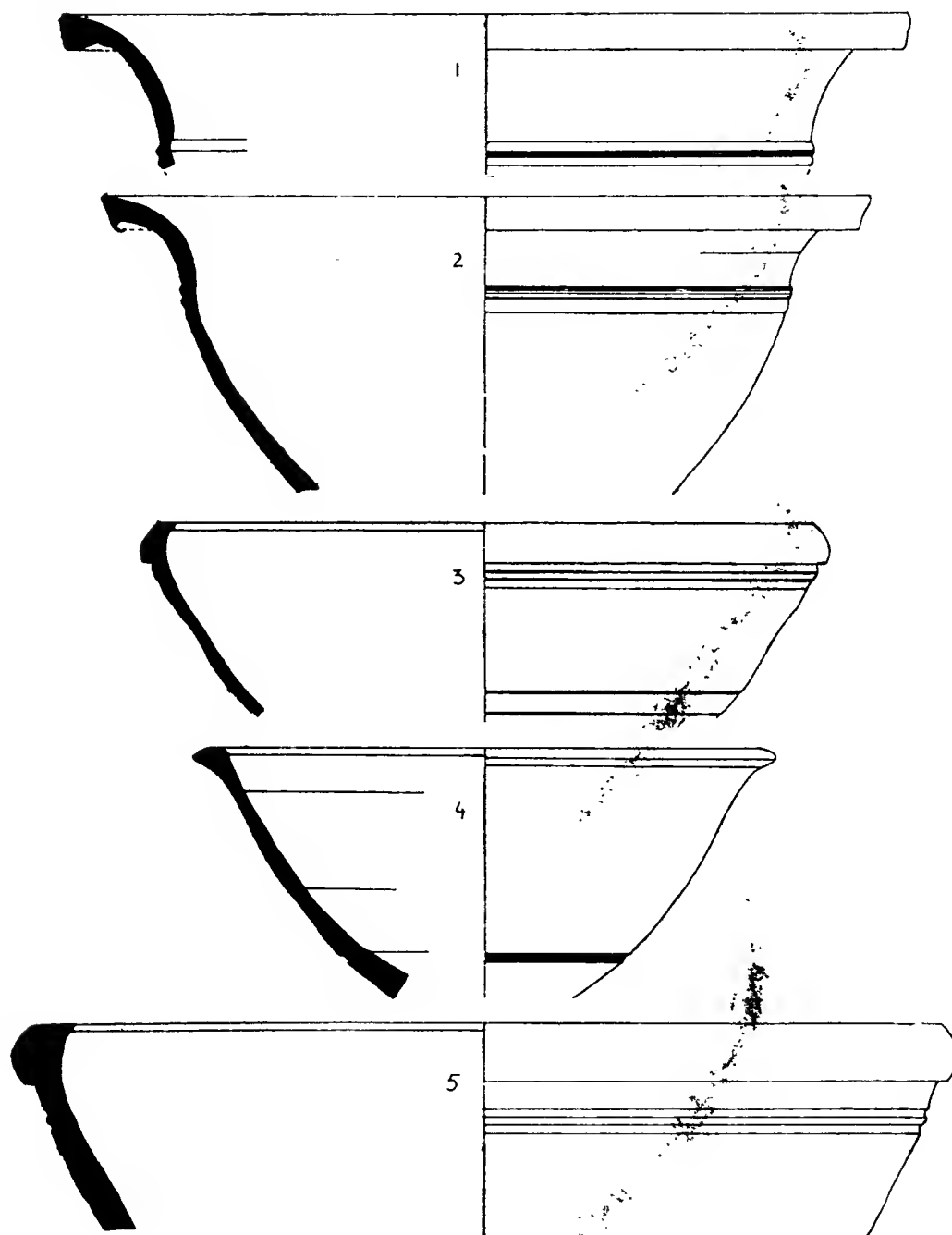
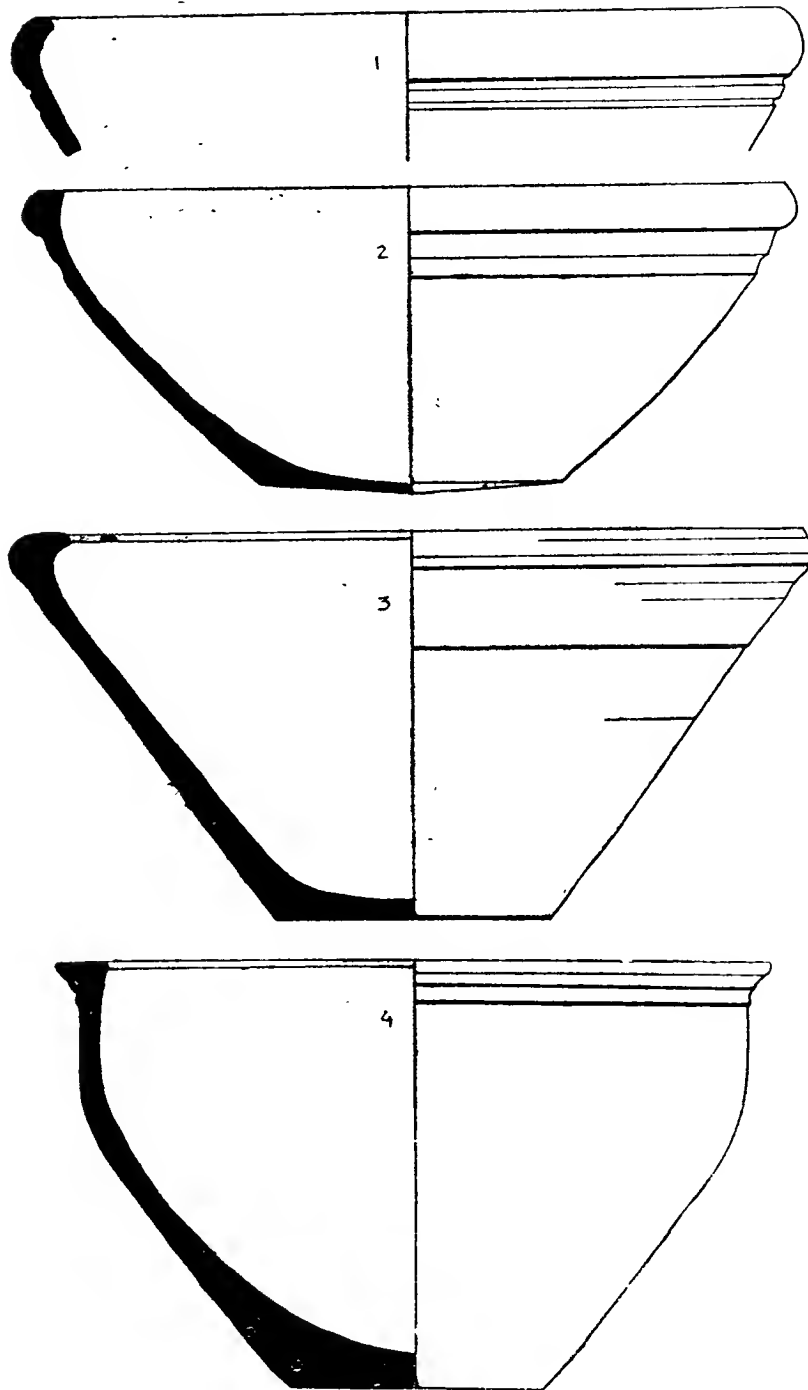


Fig 29
0 1 2 3

SCYTHO - PARTHIAN PERIOD
RED WAREFig 30
1" 2" 3"

RED WARE

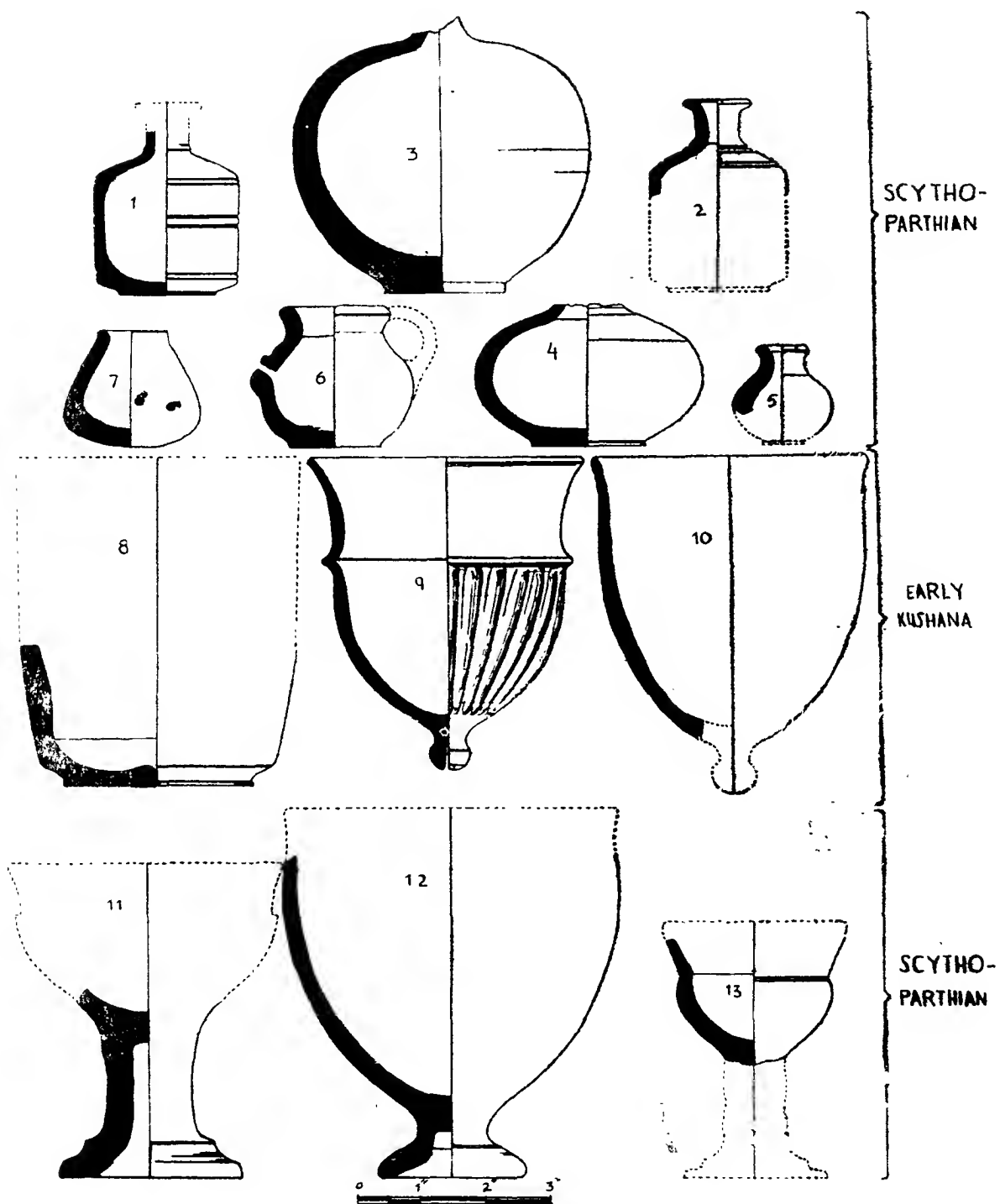


Fig. 31

sandy particles and other degraissants. So far this variety has been found from one pottery group in A7' (6). The types are catalogued below:-

Fig. 11

GREEK LEVEL

*Grey Ware.*Type 1. *Thali*:

1. *Thali* (dish), rim out-turned and cut aslant and sagger based D1 (12) See *Ghosh* No. 25b, but his example has a slight kick towards the base.
2. *Thali*, bevelled rim, externally grooved and flat base, K9' (8).

SCYTHO-PARTHIAN PERIOD

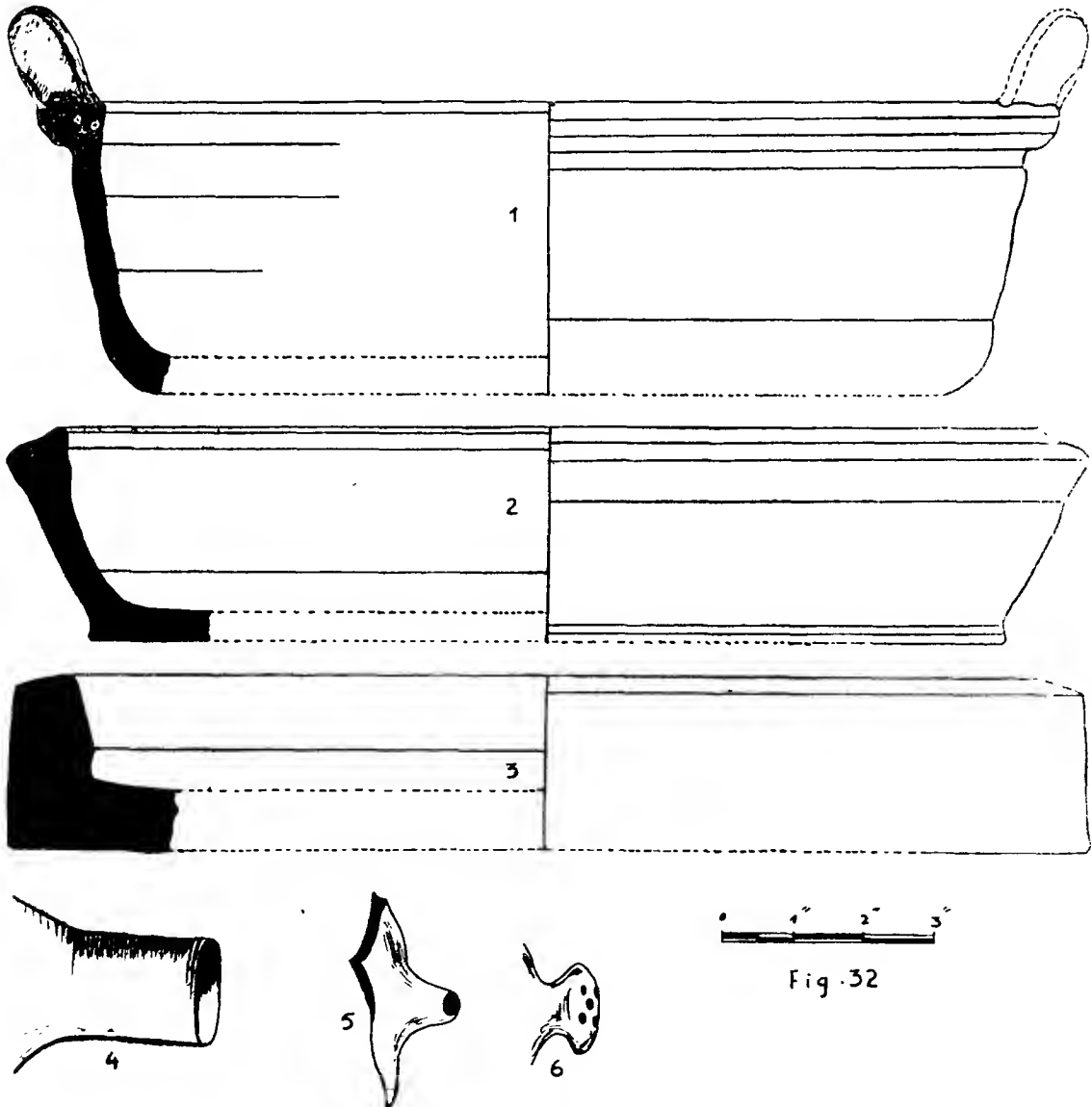
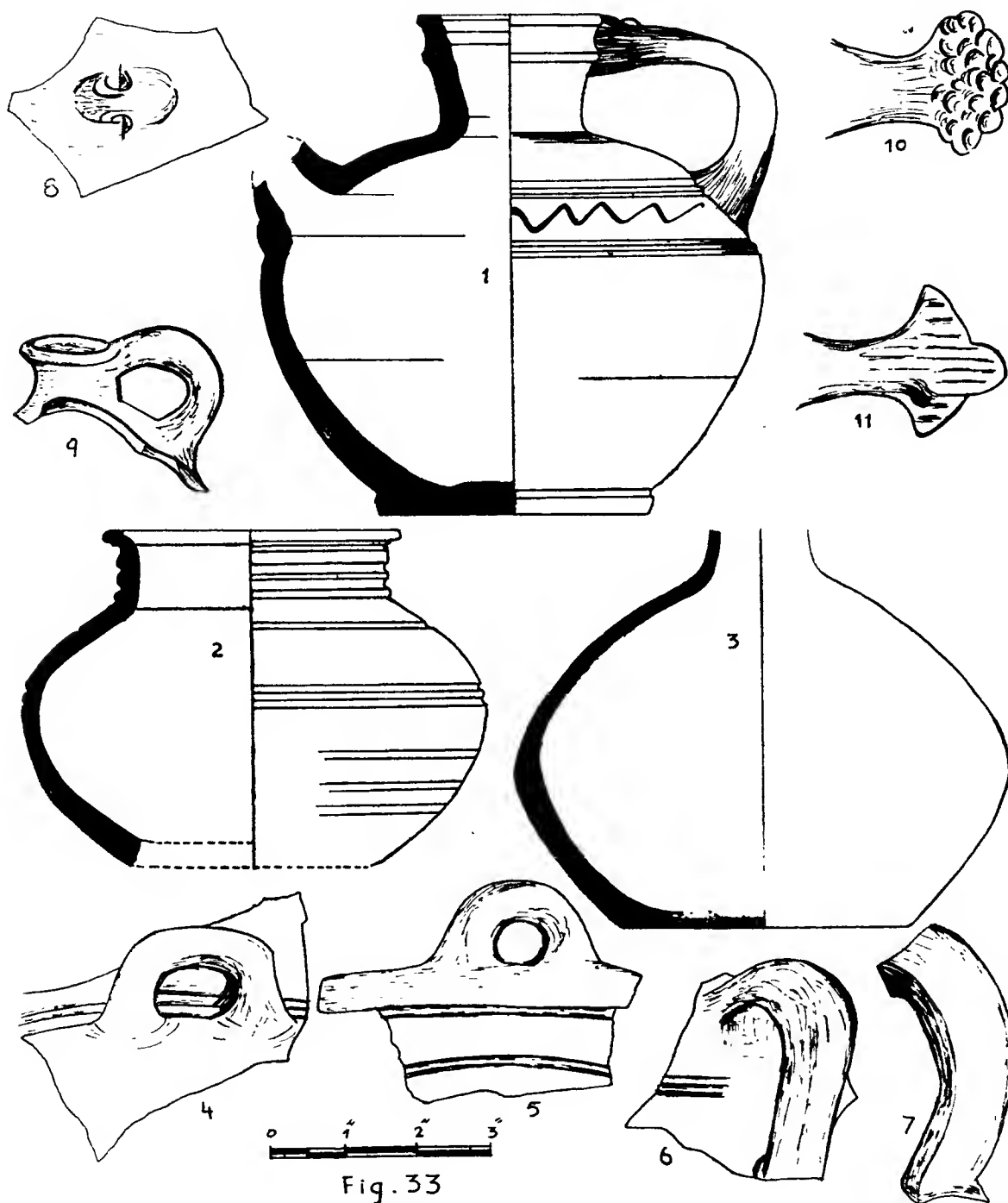


Fig. 32

SCYTHO - PARTHIAN PERIOD
RED WARE



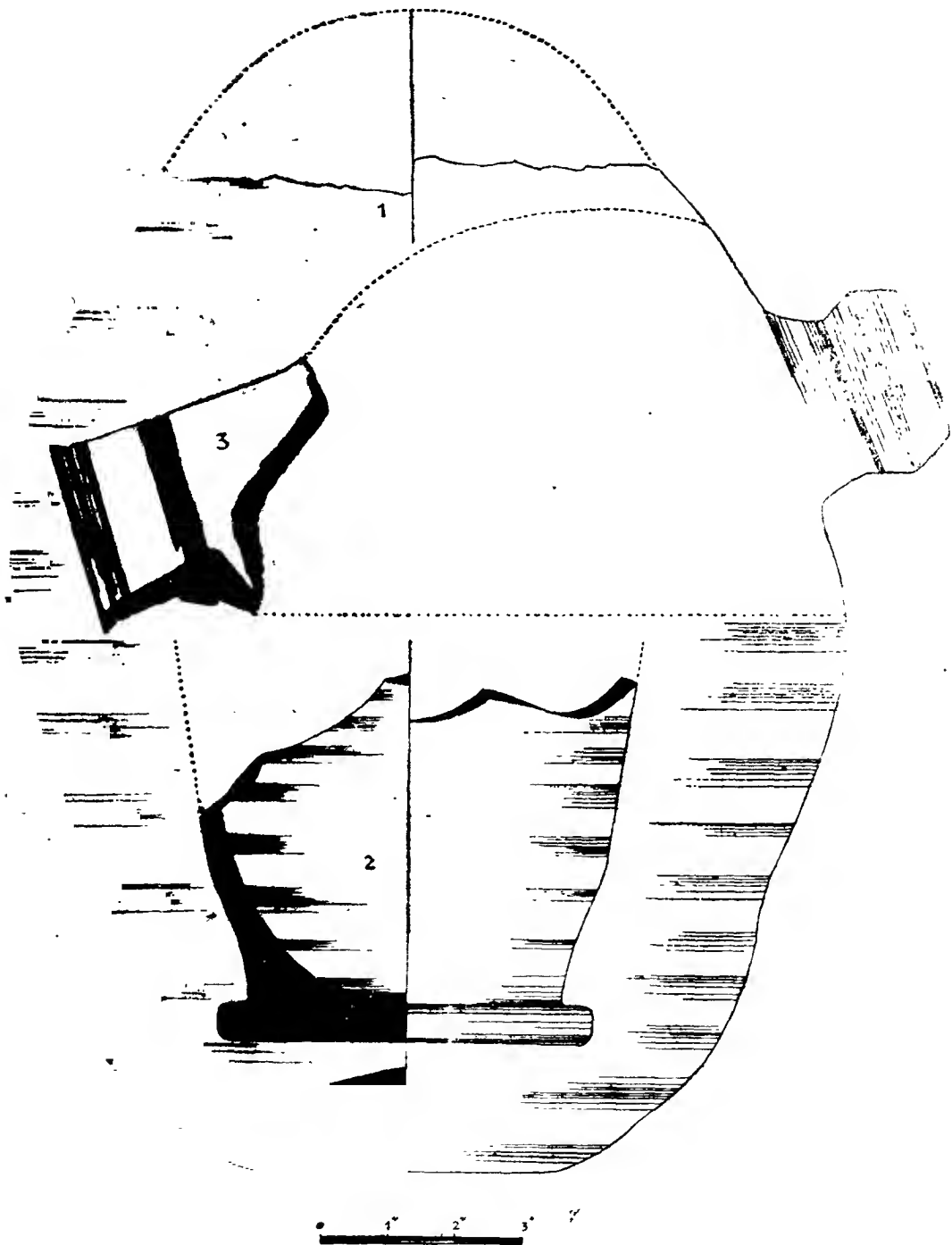
SCYTHO - PARTHIAN PERIOD
RED WARE

Fig. 34

SCYTHO - PARTHIAN PERIOD
RED WARE

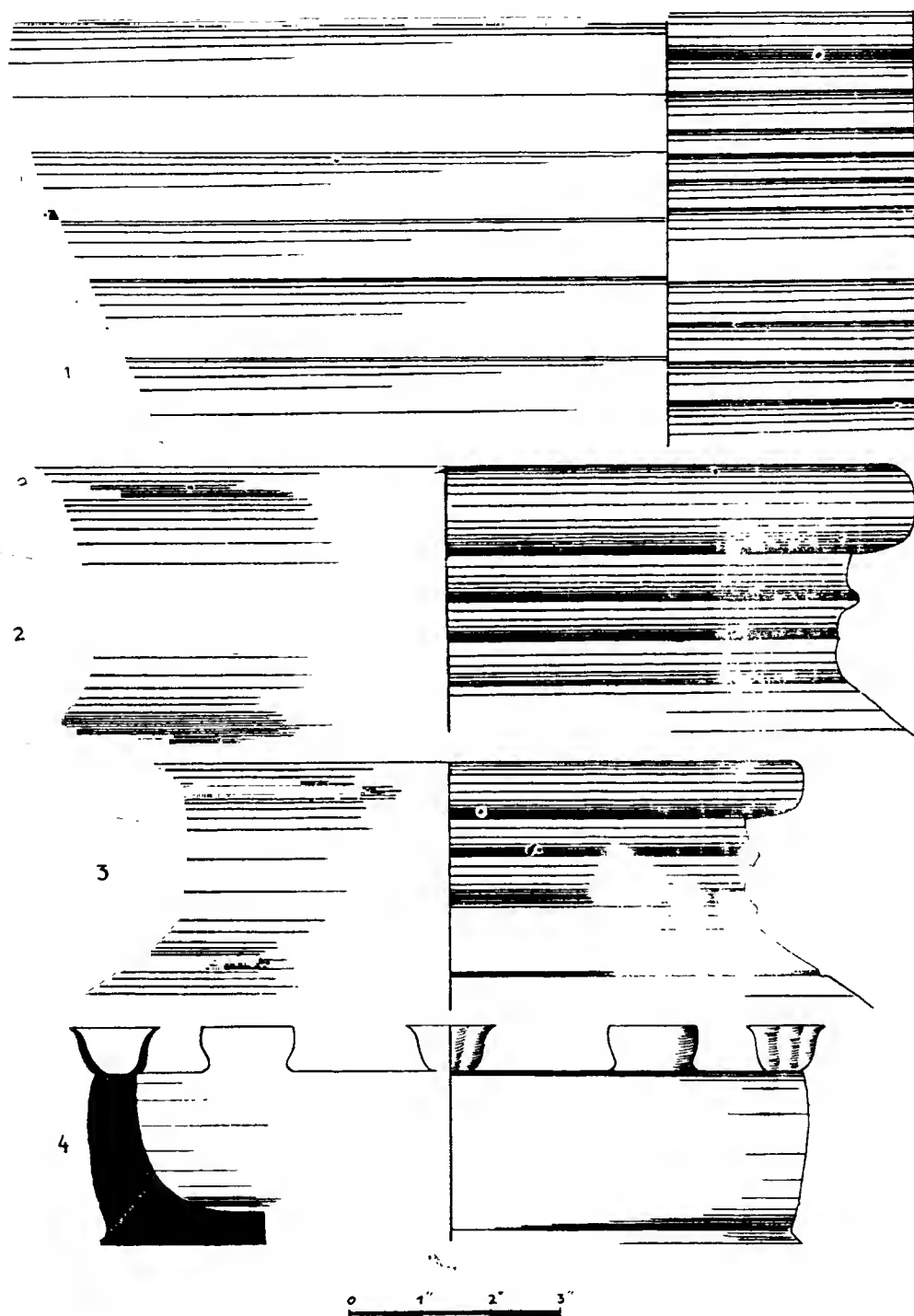


Fig. 35

SCYTHO - PARTHIAN PERIOD
RED WARE

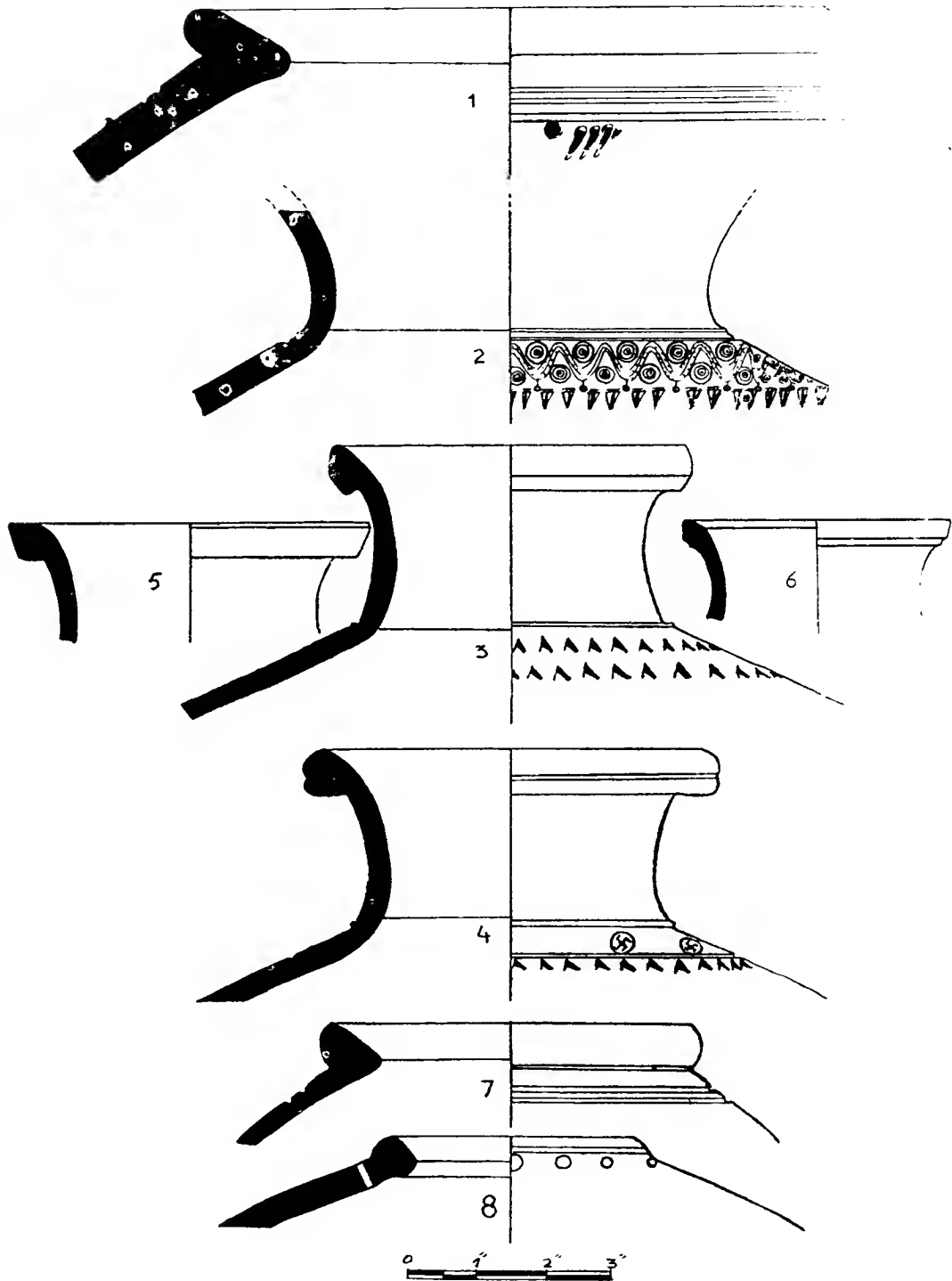
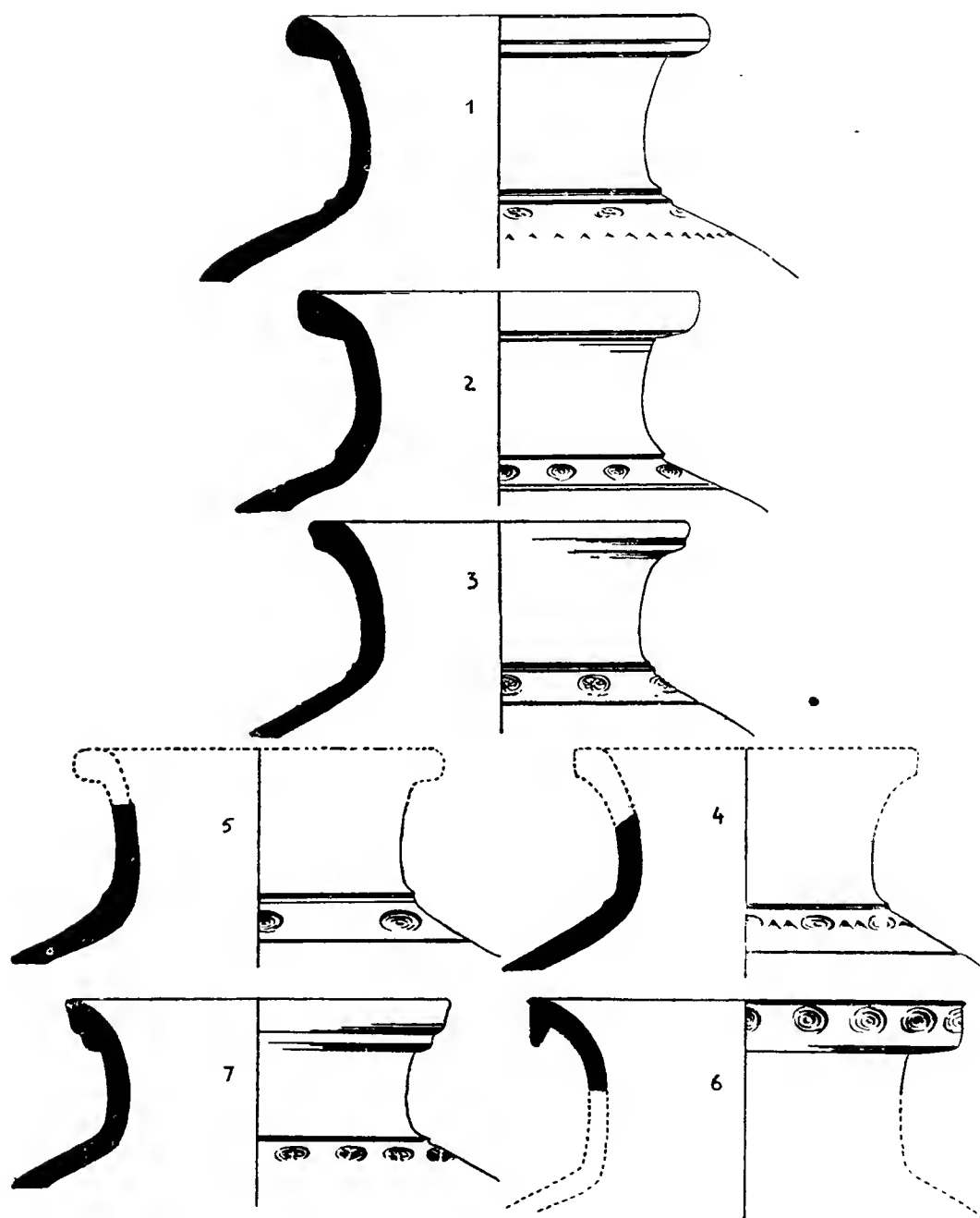


Fig. 36

SCYTHO - PARTHIAN PERIOD
RED WARE



0 1 2 3

Fig. 37

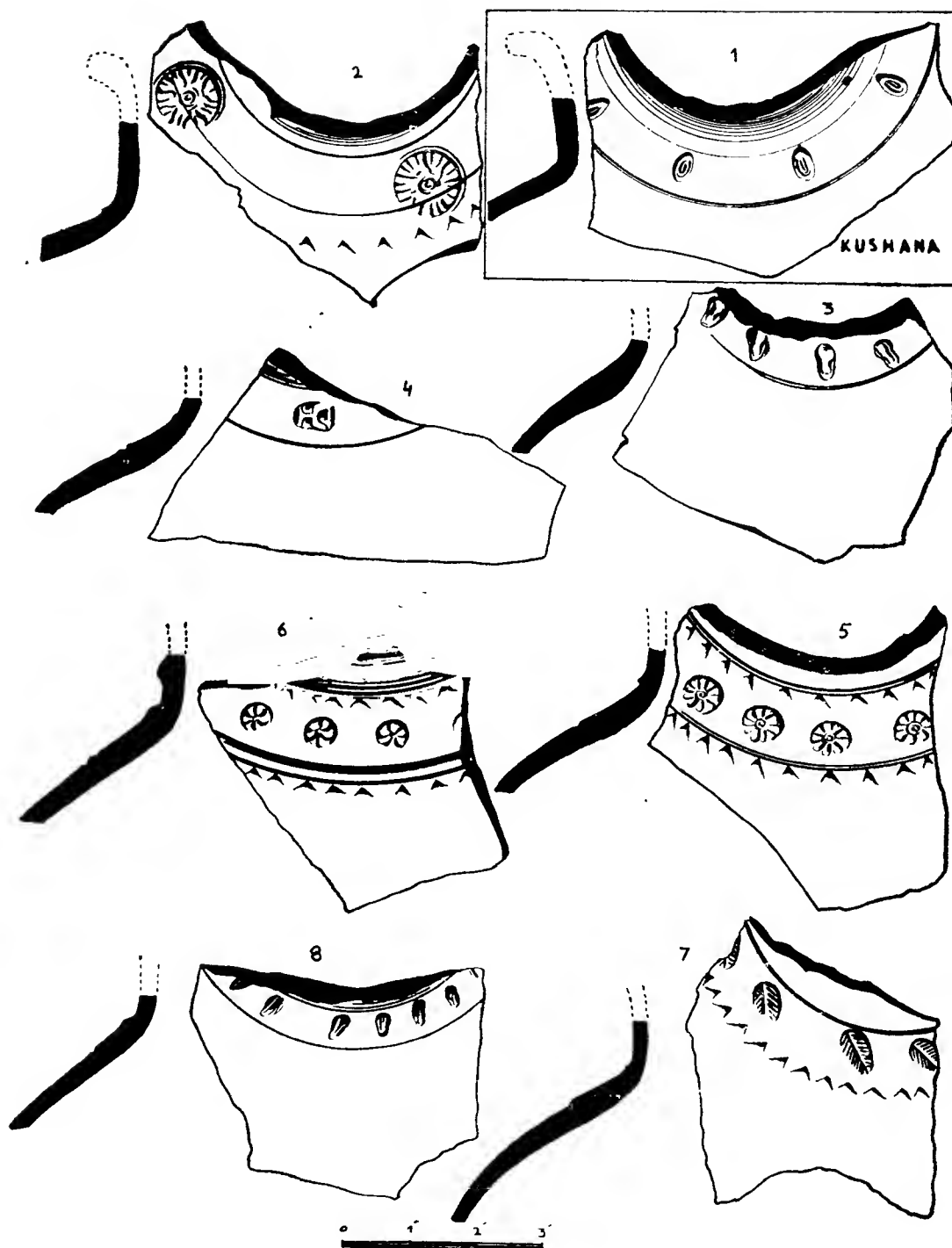
SCYTHO-PARTHIAN PERIOD
RED WARE

Fig. 38

SCYTHO - PARTHIAN PERIOD
RED- WARE

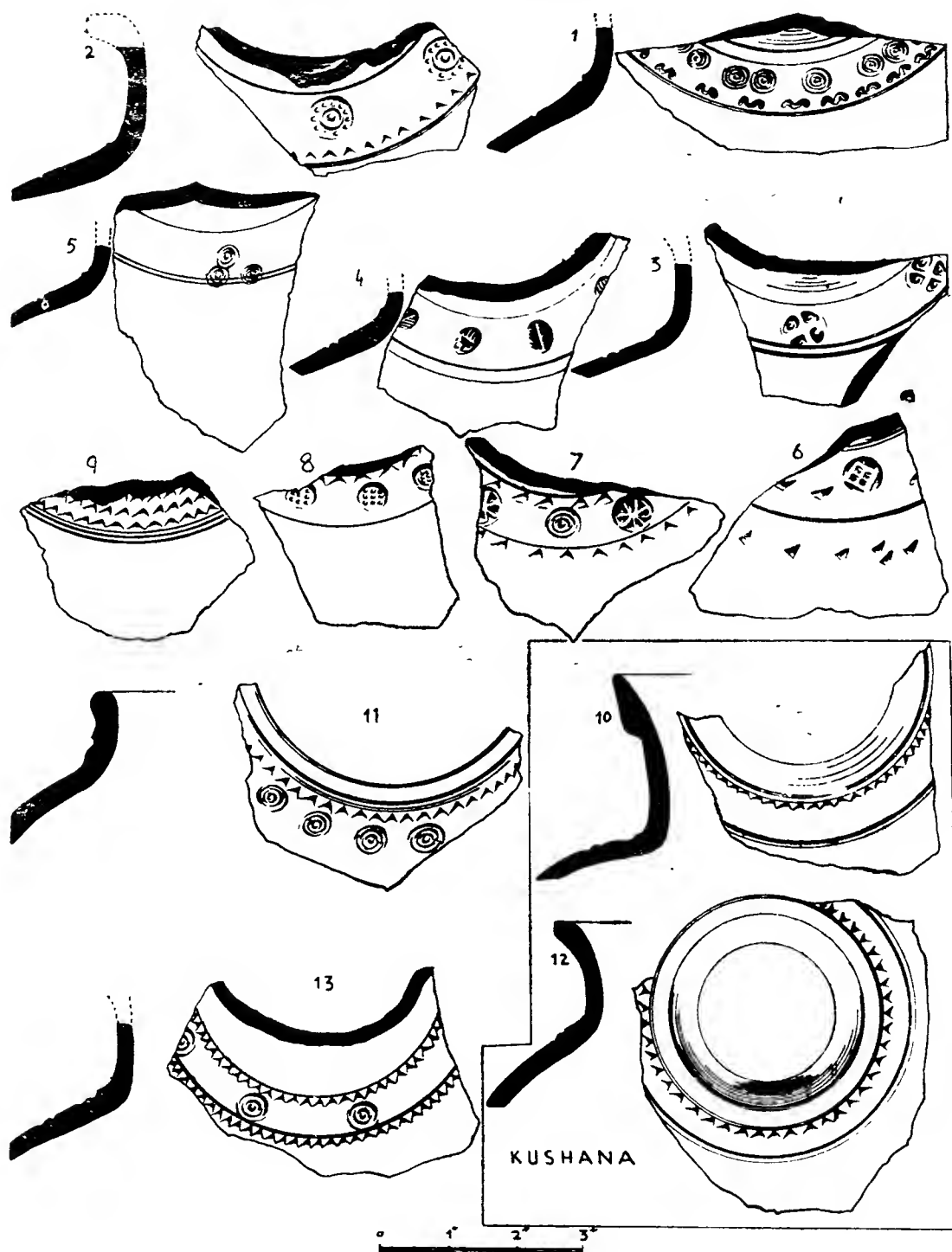


Fig. 39

RED WARE

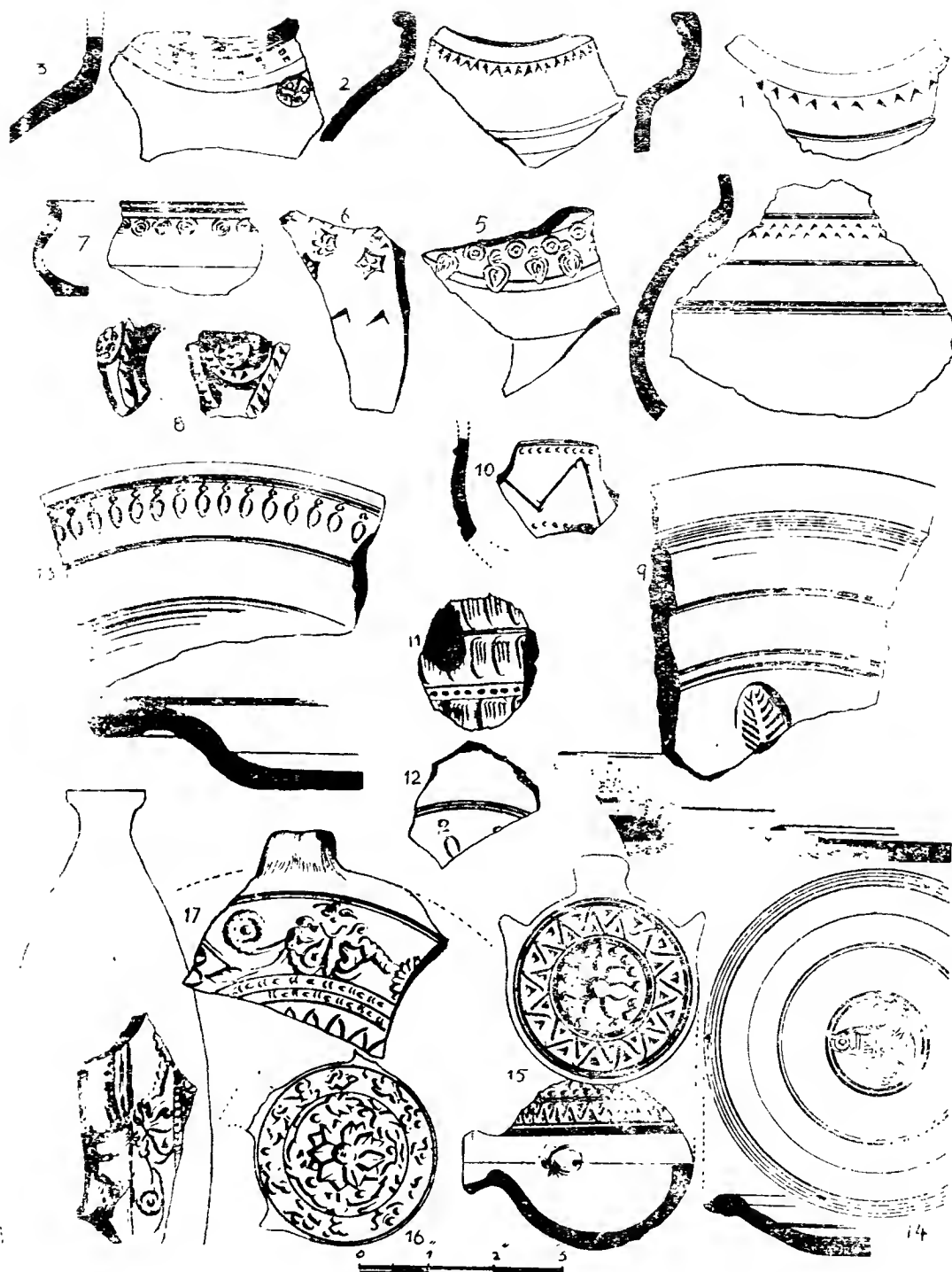


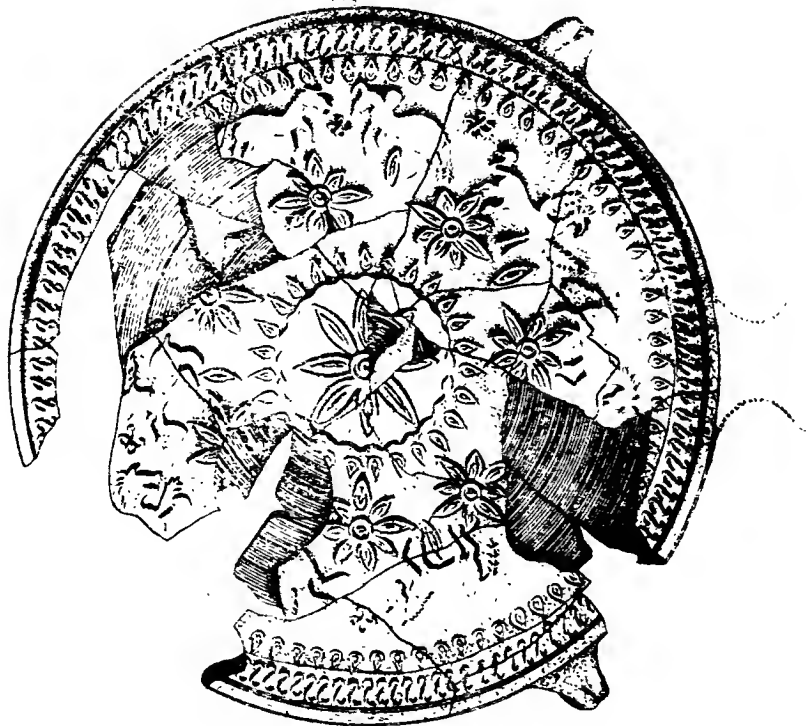
Fig. 40



1a

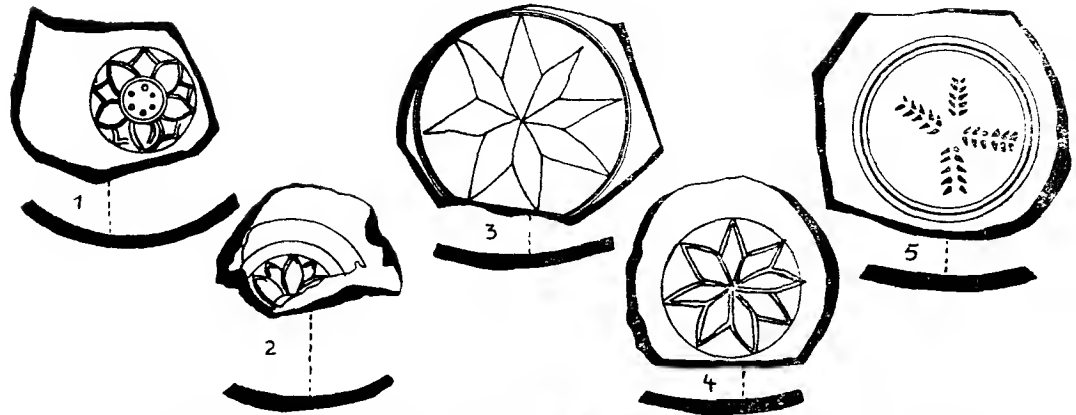


Fig. 41



1b

RED WARE
SCYTHO - PARTHIAN PERIOD



KUSHANA

PERIOD .

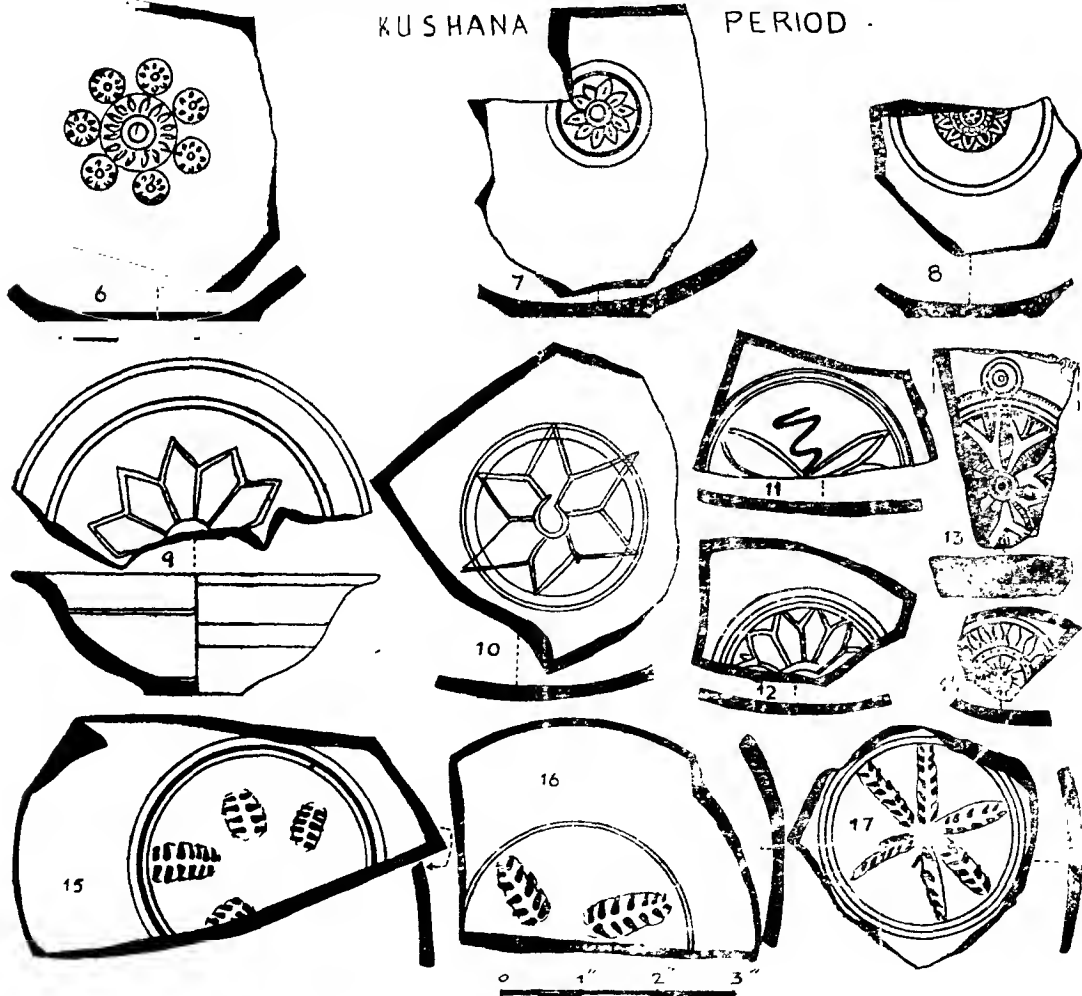


Fig. 42

PAINTED SHERDS
SCYTHO-PARTHIAN

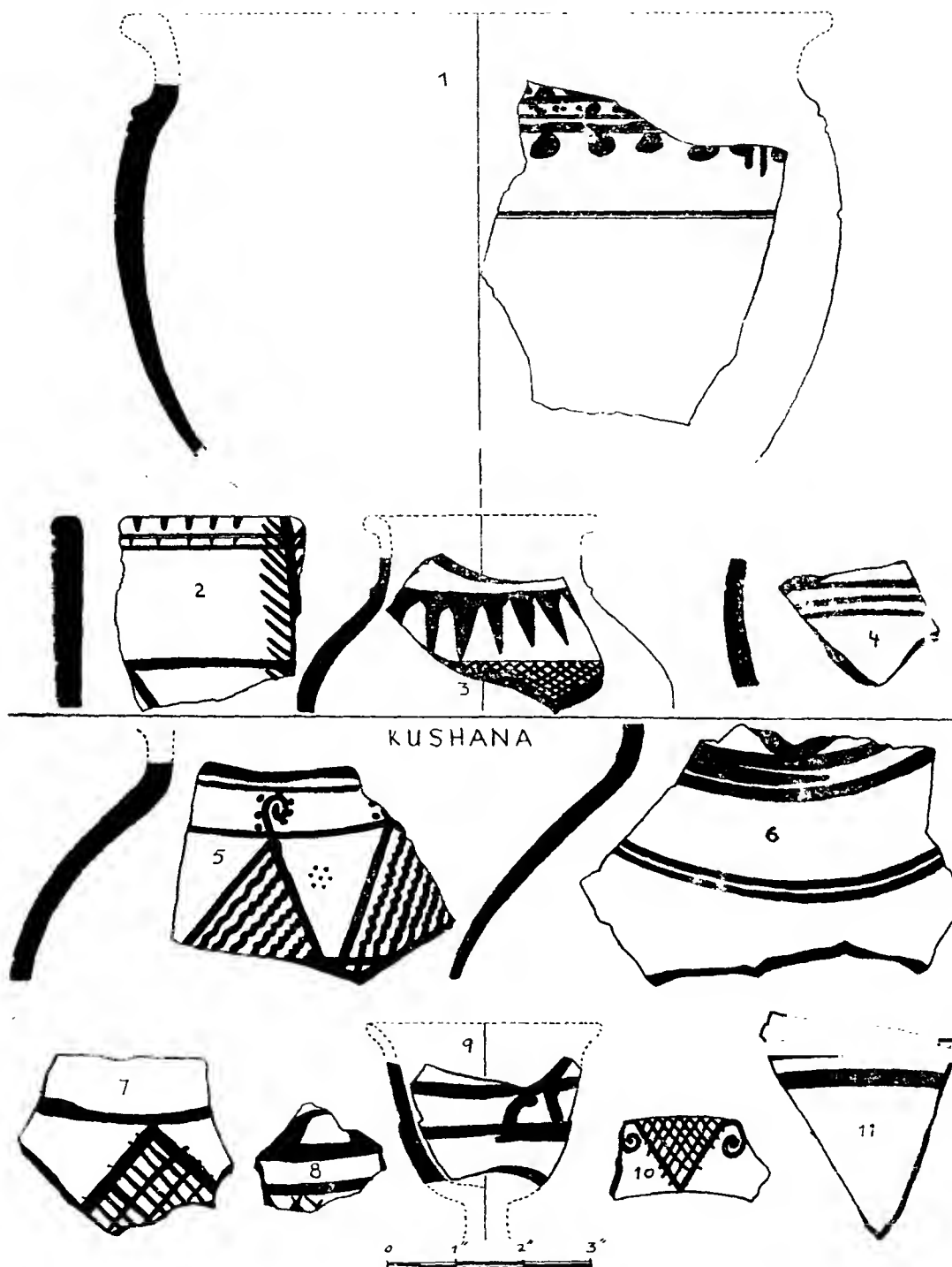


Fig. 43

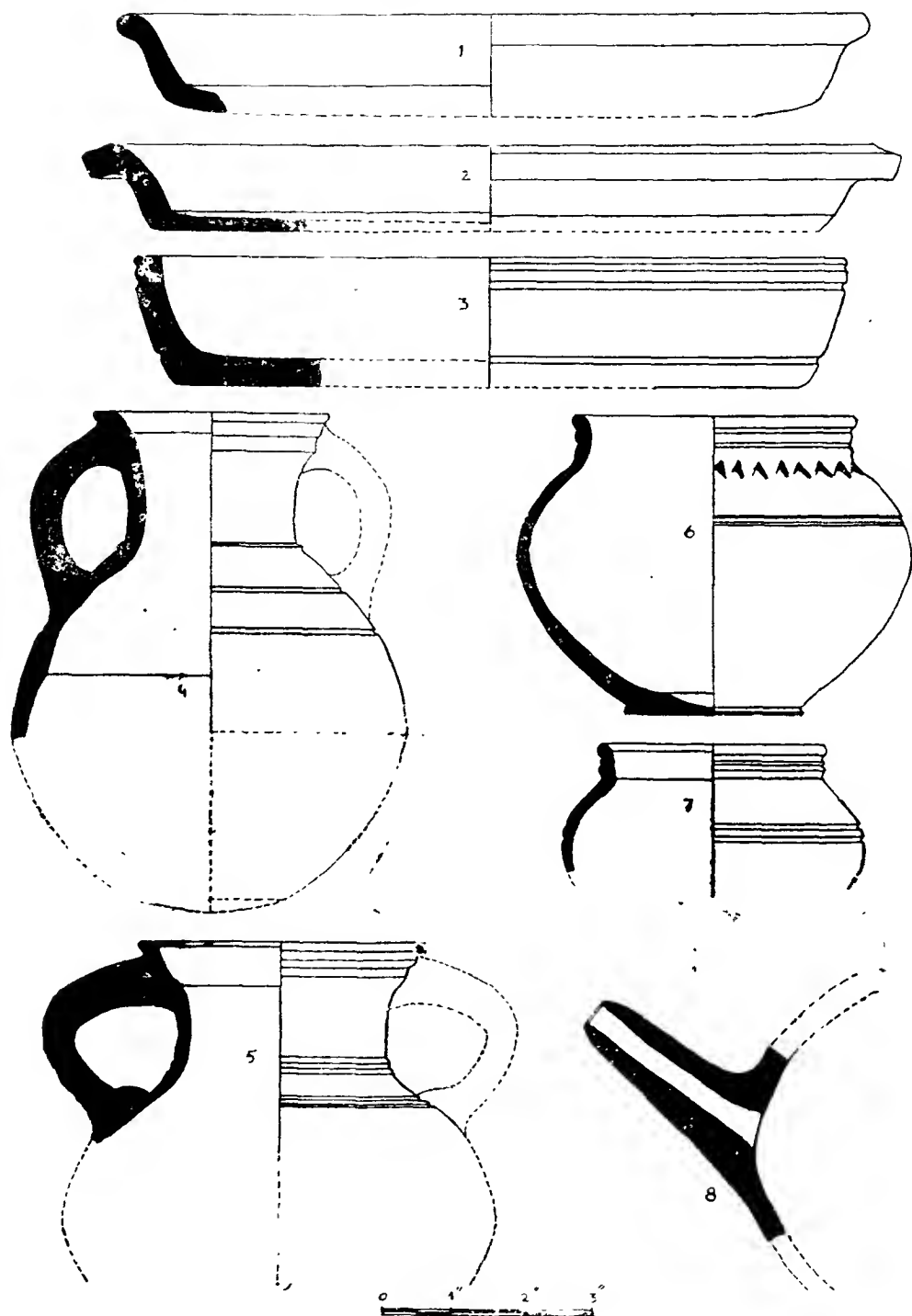
KUSHANA
GREY WARE

Fig 44

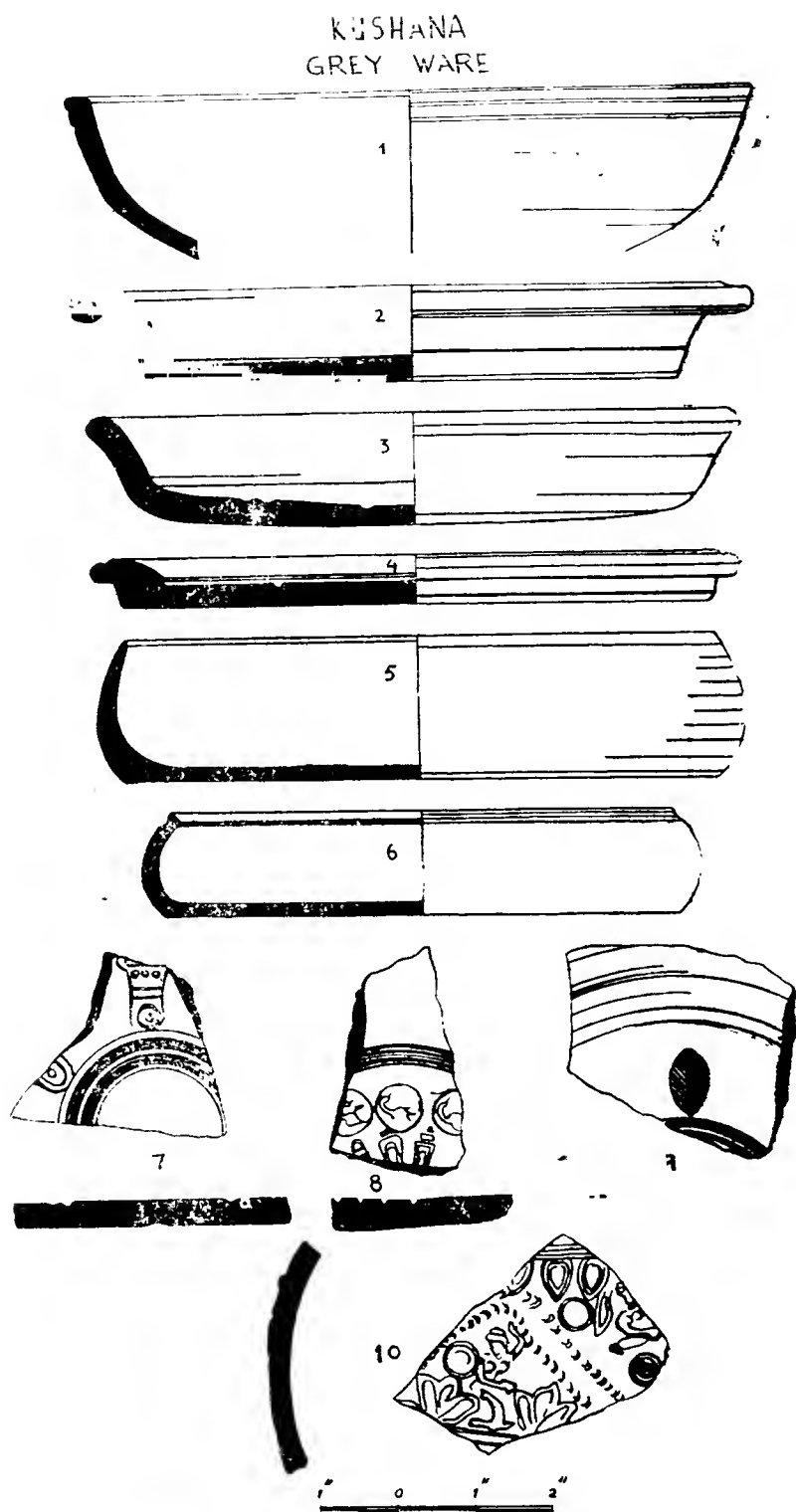


Fig. 45

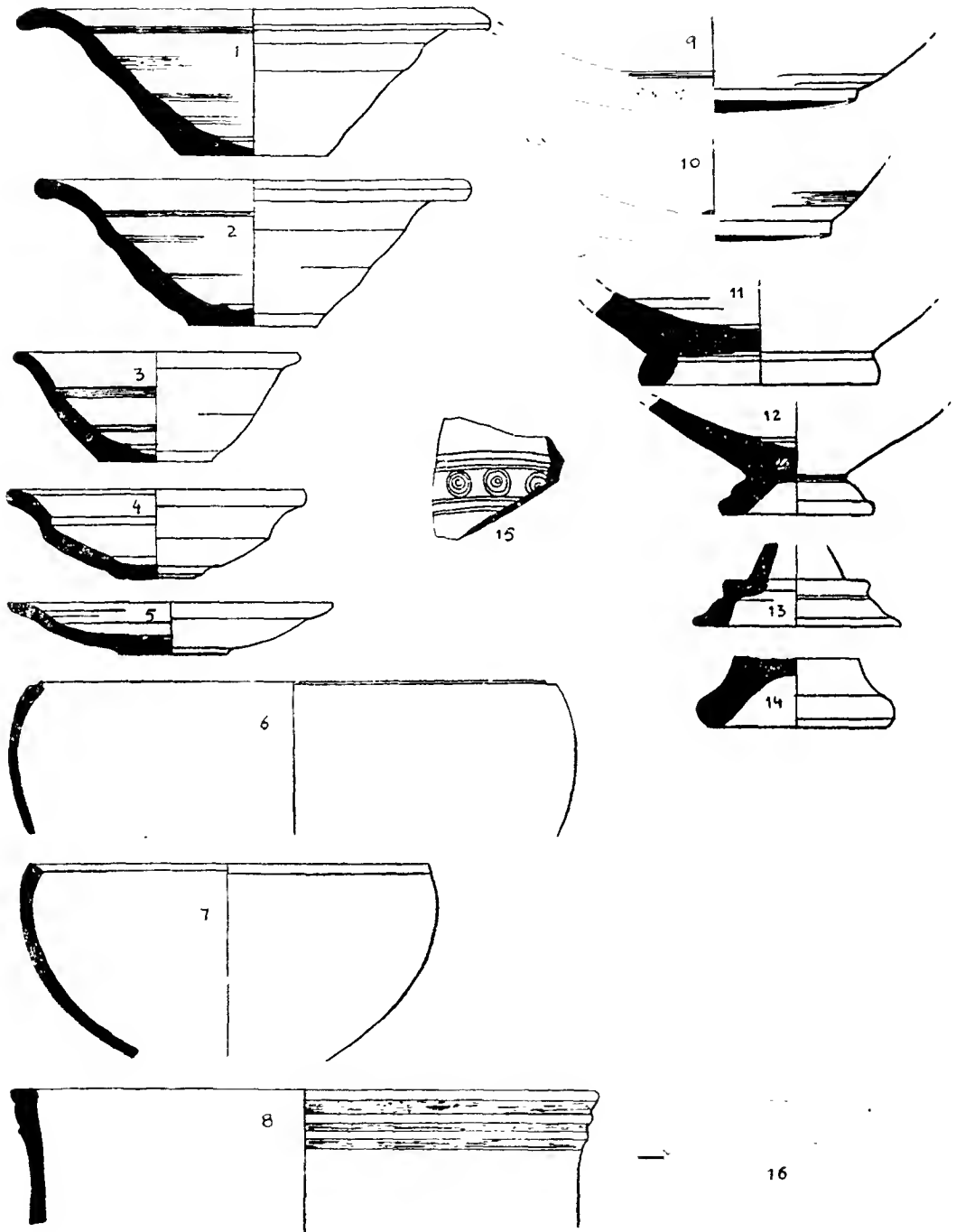
KUSHANA
GREY WARE

Fig. 46

KUSHANA
GREY WARE

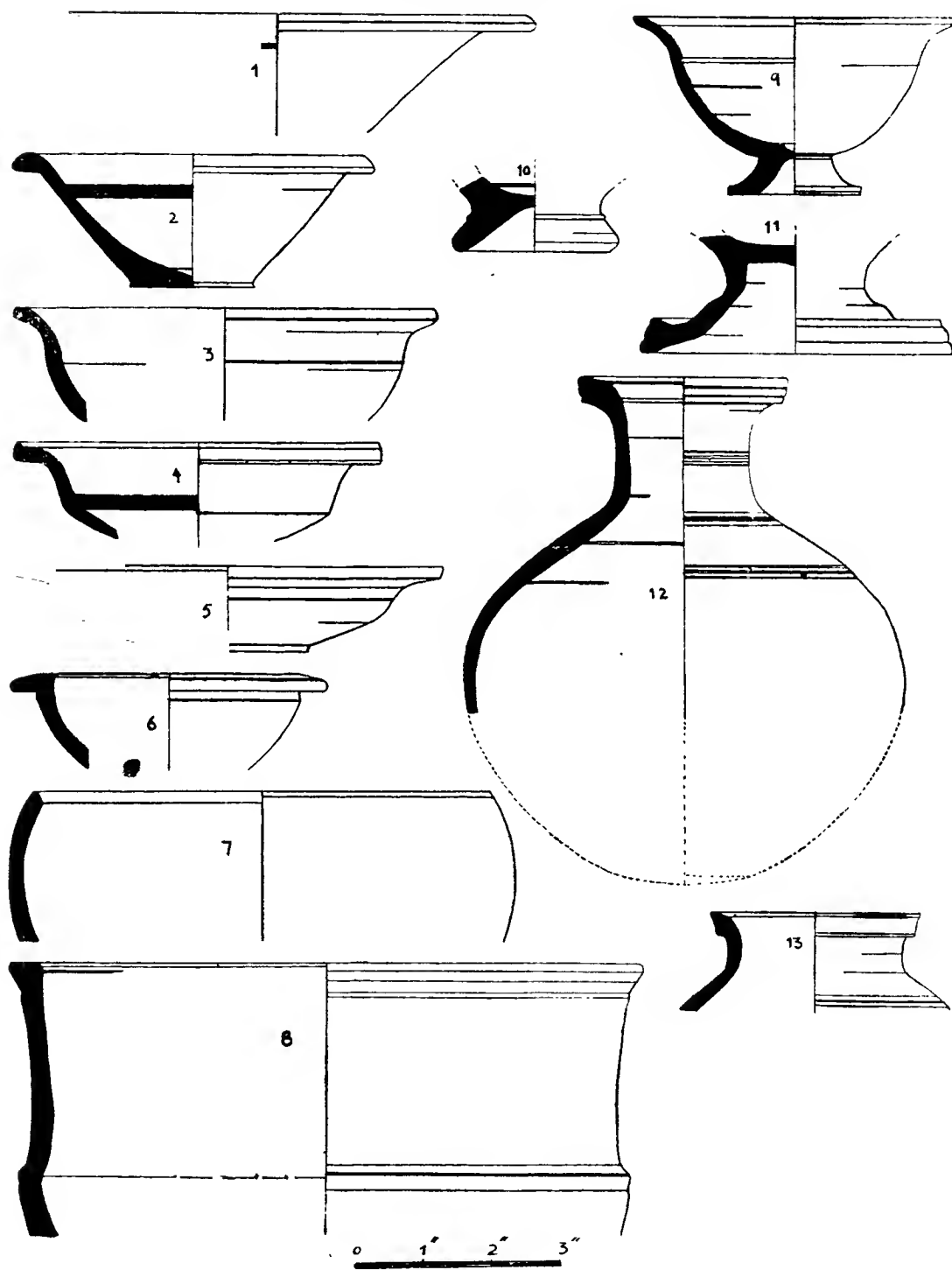
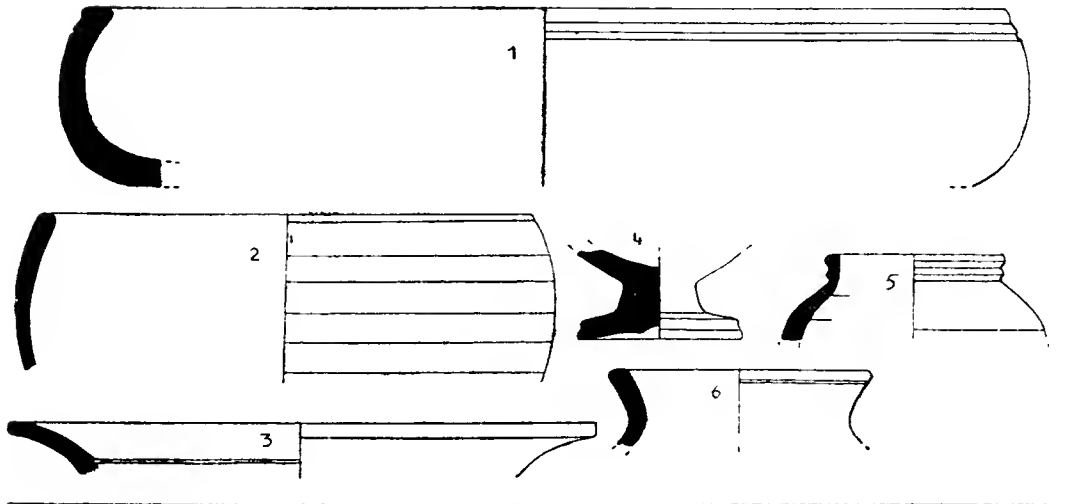
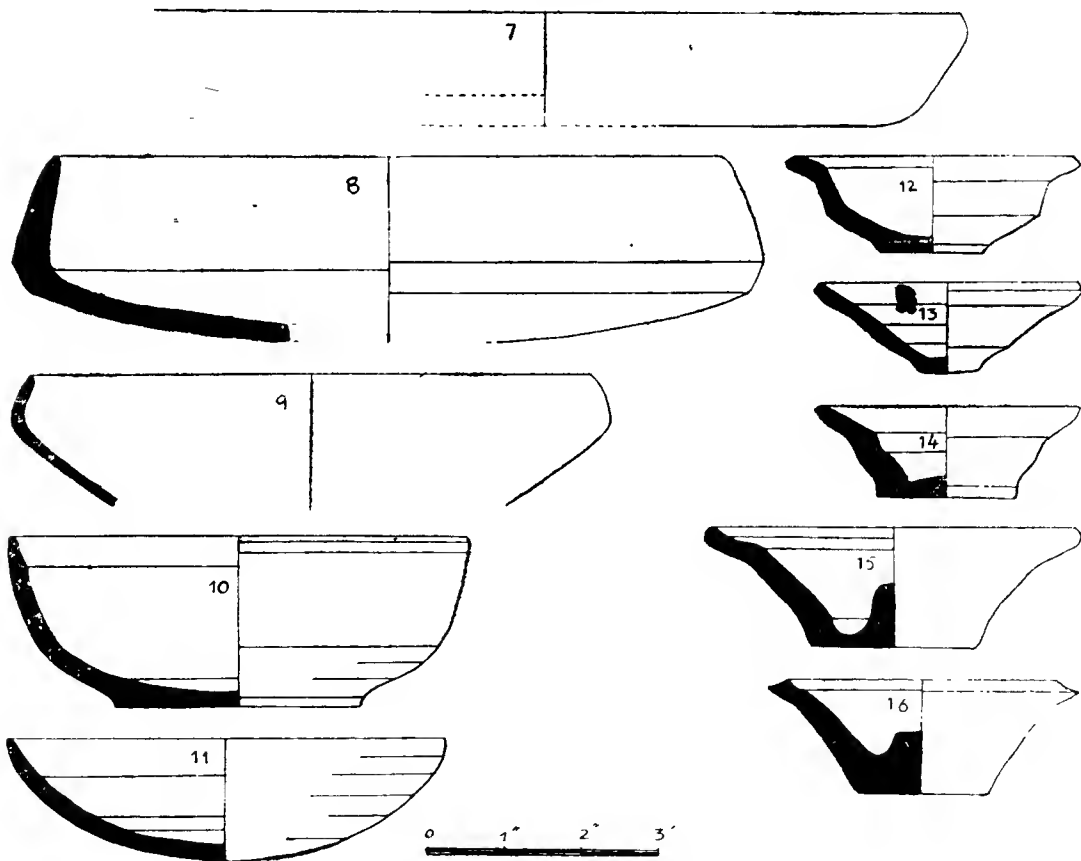


Fig. 47

KUSHANA PERIOD
GREY WARE

RED WARE



0 1" 2" 3"

Fig. 48

REDWARE
KUSHANA PERIOD

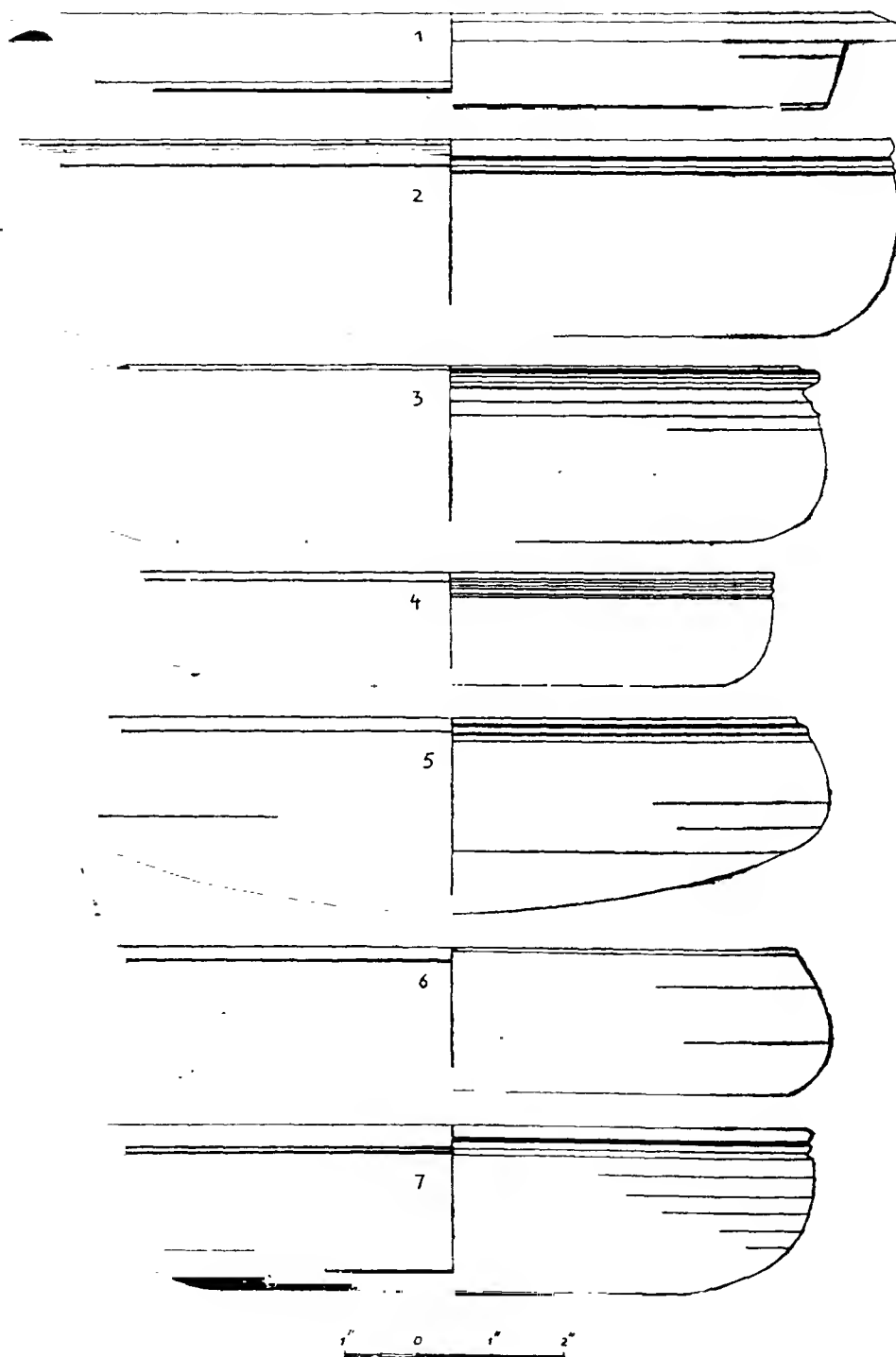


Fig. 49

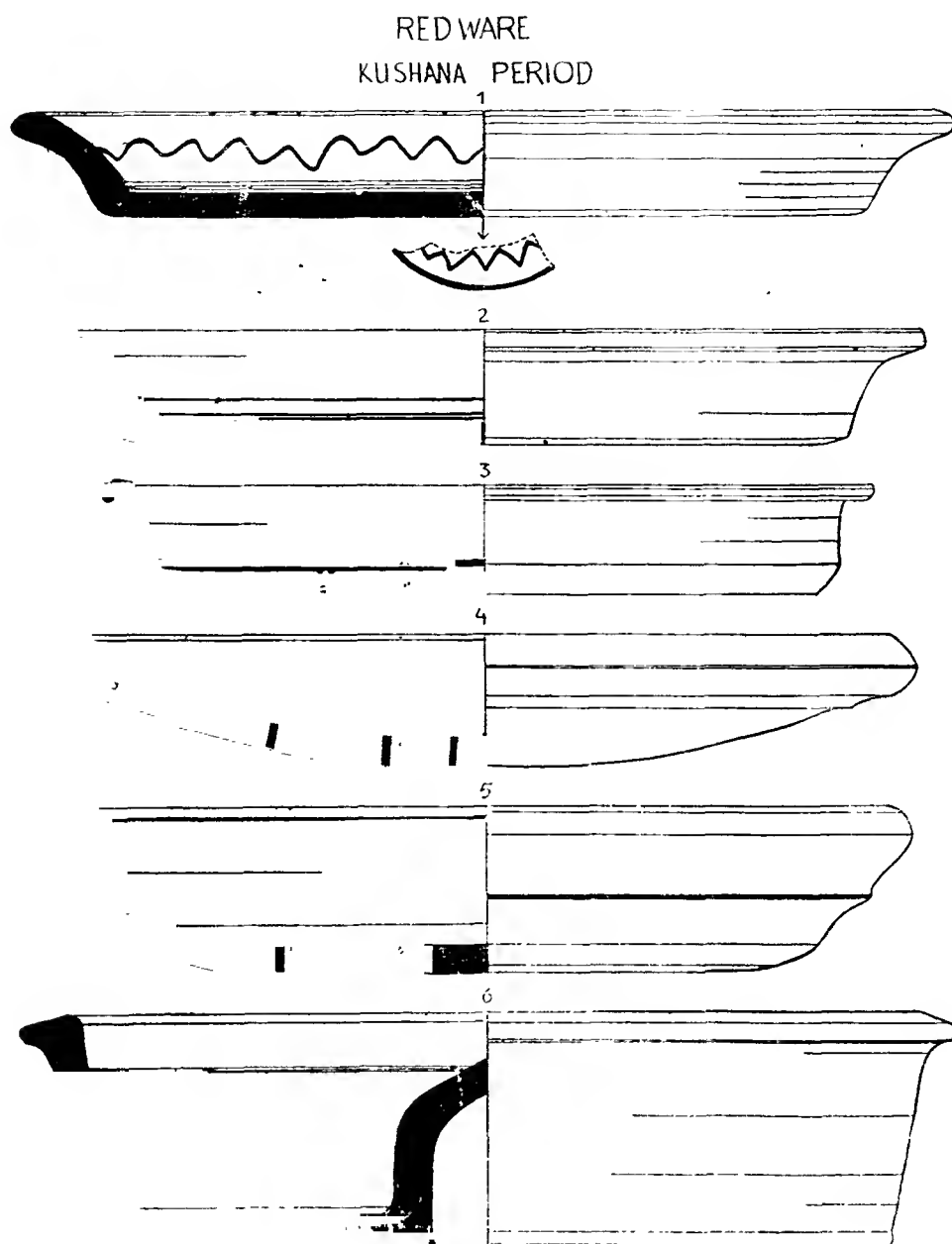


Fig 50

RED WARE
KUSHANA PERIOD

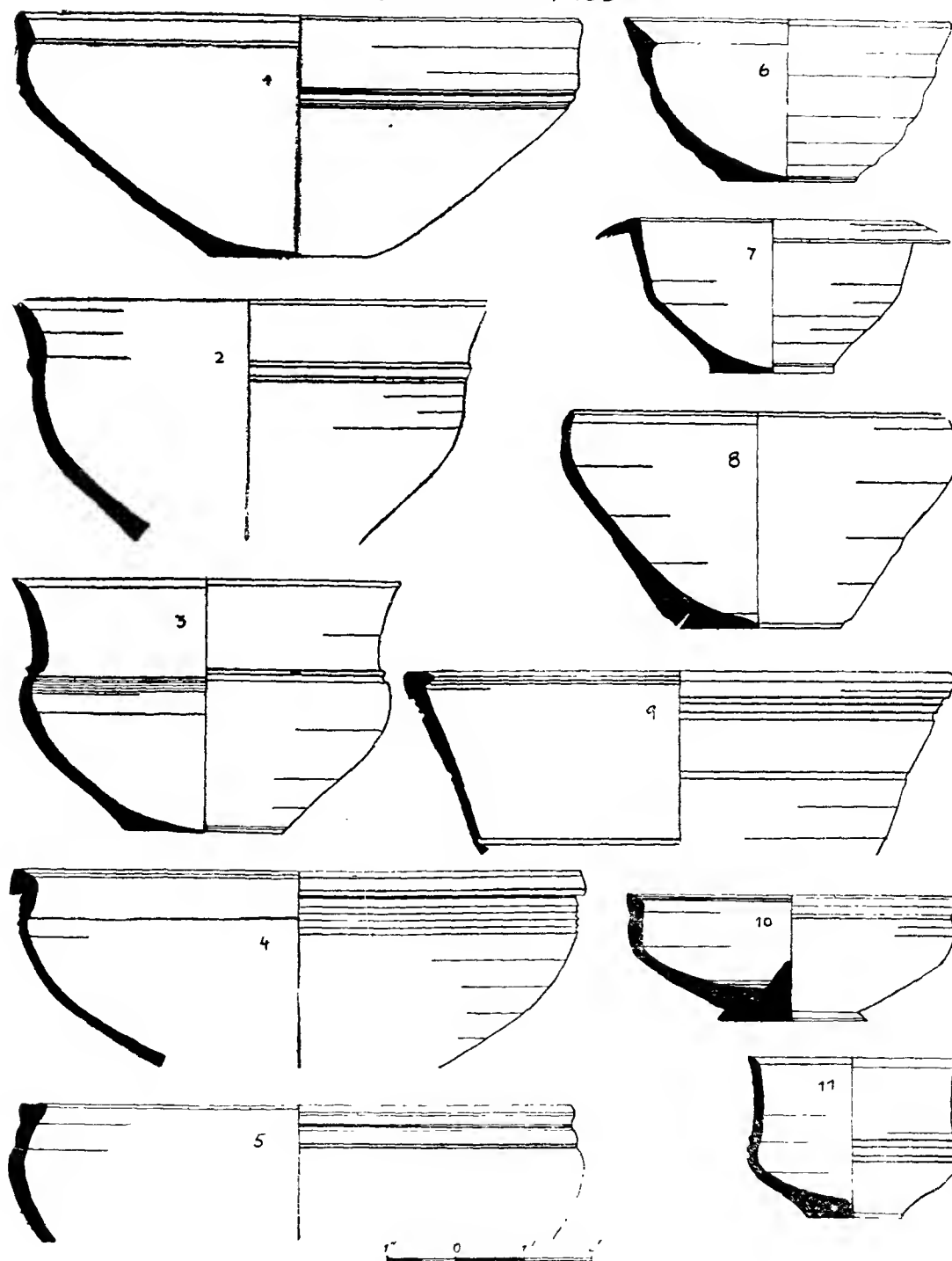


FIG 51

KUSHANA PERIOD
RED WARE

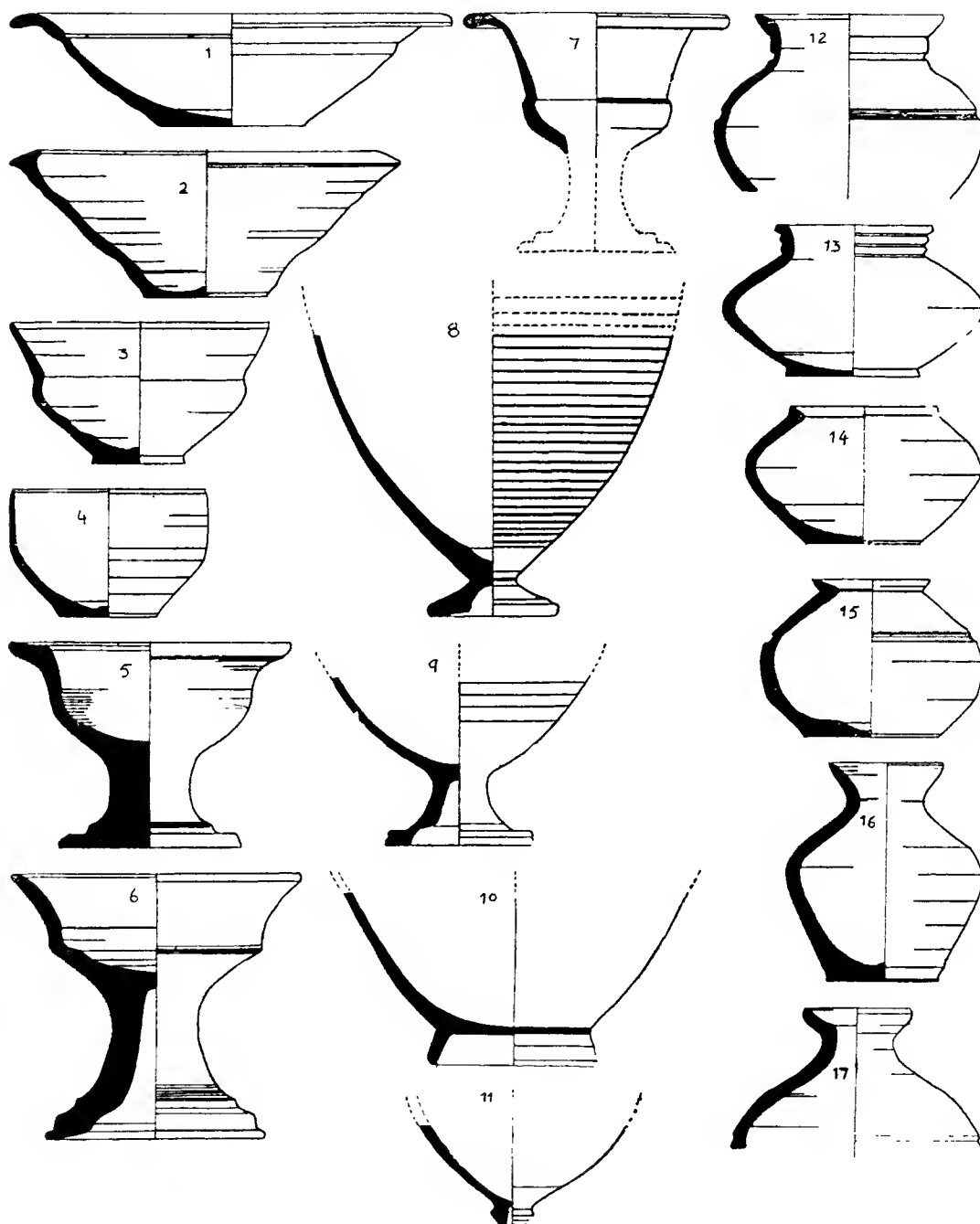
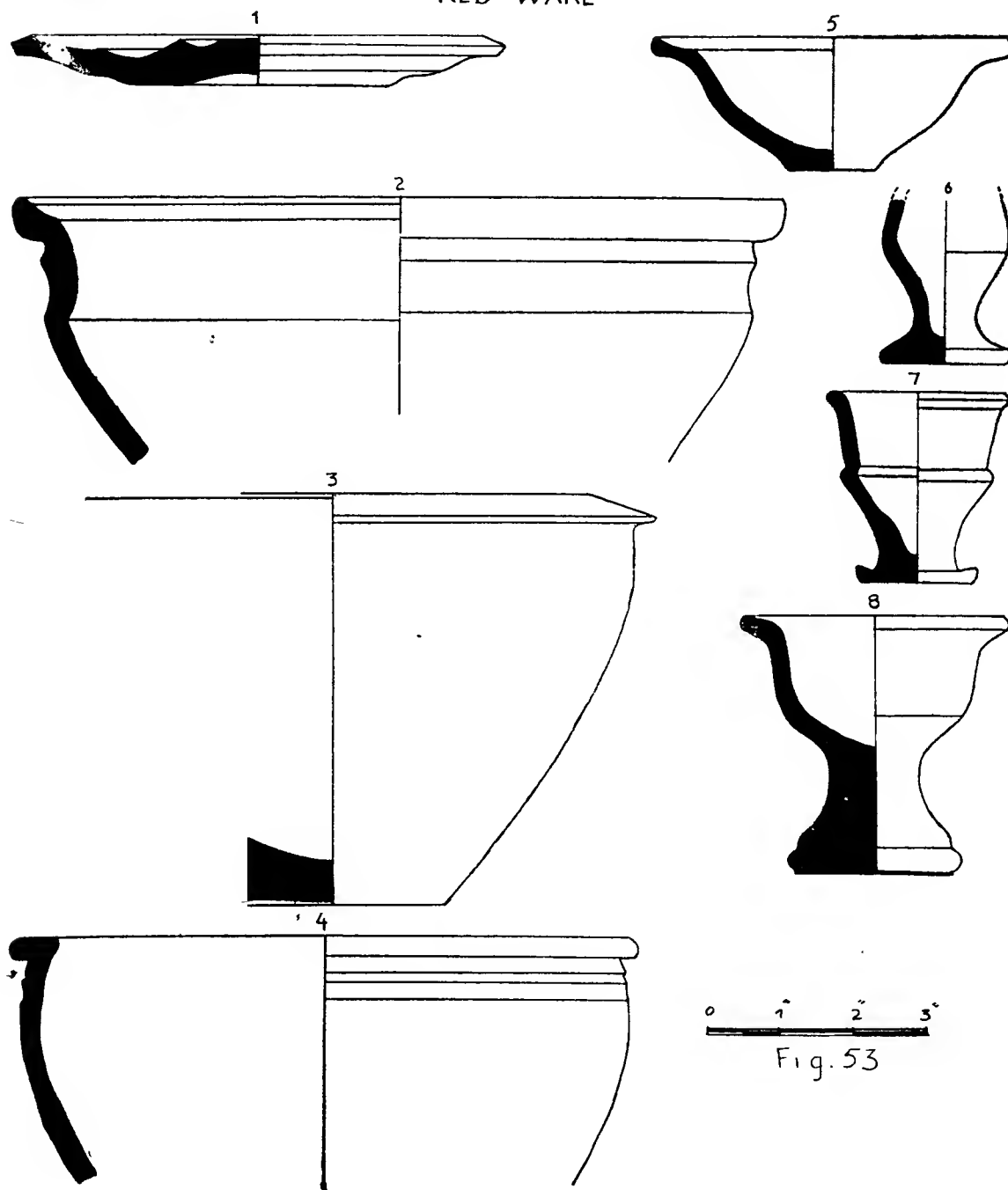


Fig. 52

KUSHANA PERIOD
RED WARE



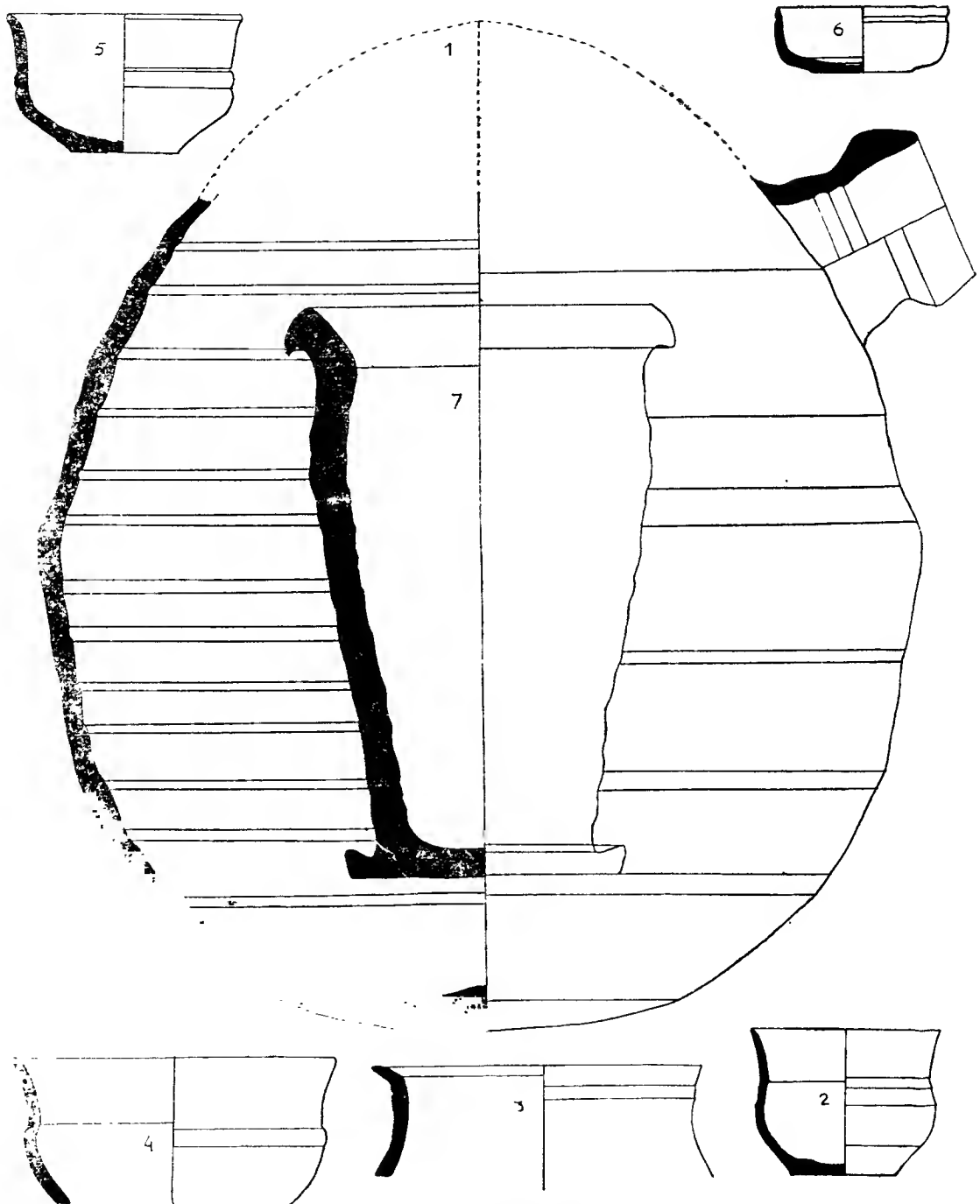
KUSHANA PERIOD
RED WARE

Fig. 54

KUSHANA PERIOD
RED WARE

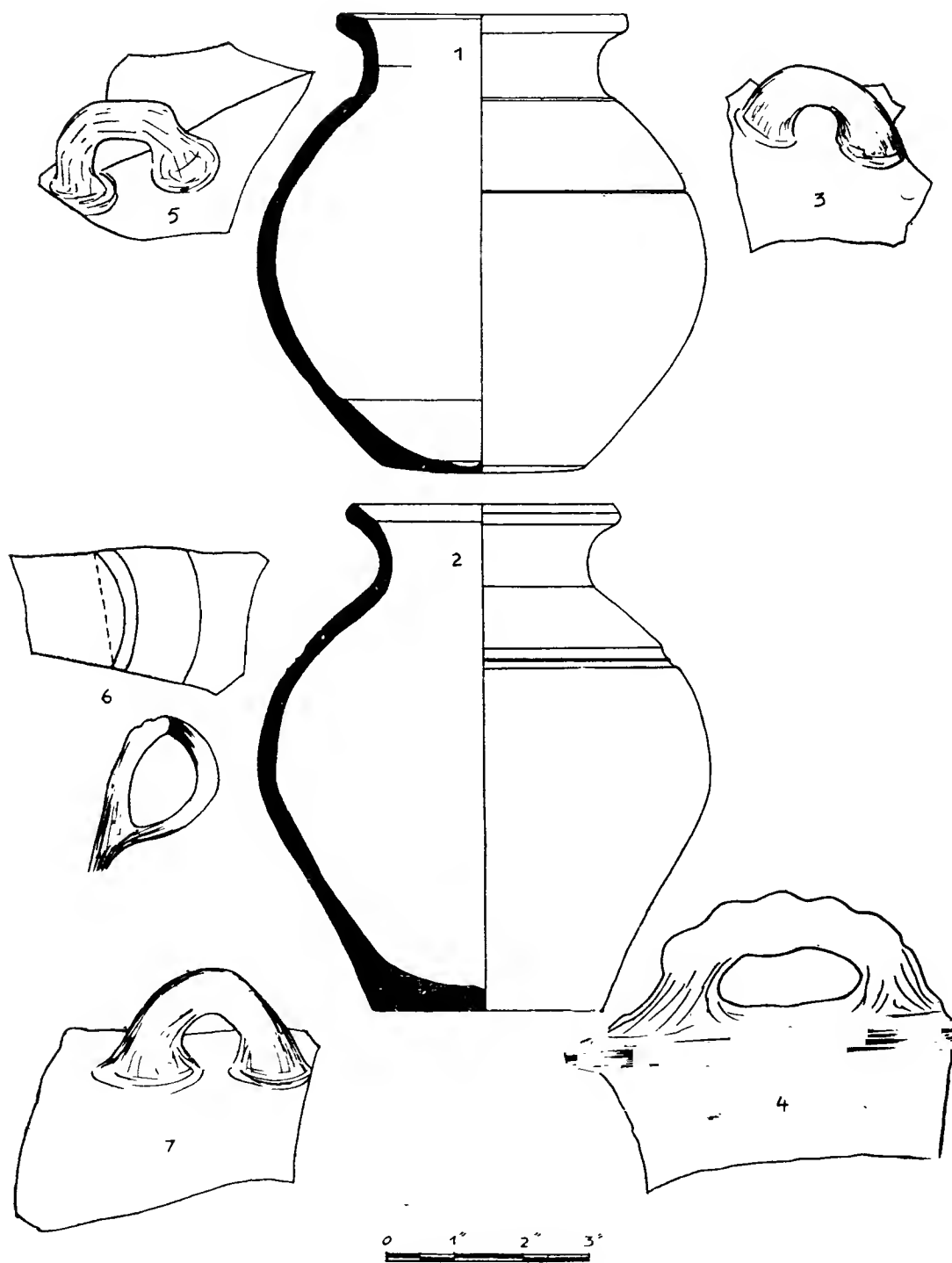


Fig. 55

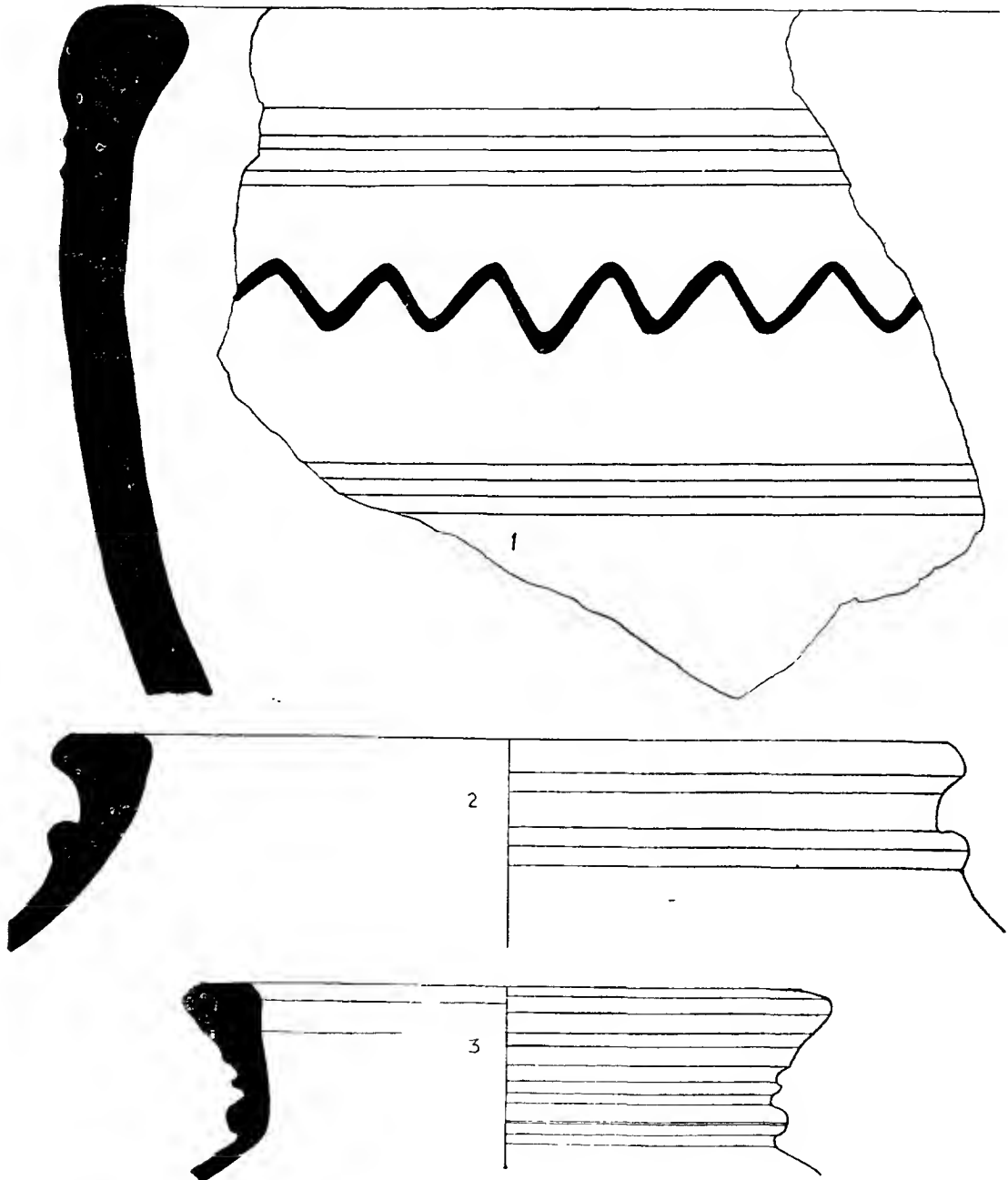
KUSHANA PERIOD
RED WARE

Fig. 56

KUSHANA.
DECORATED SHERDS

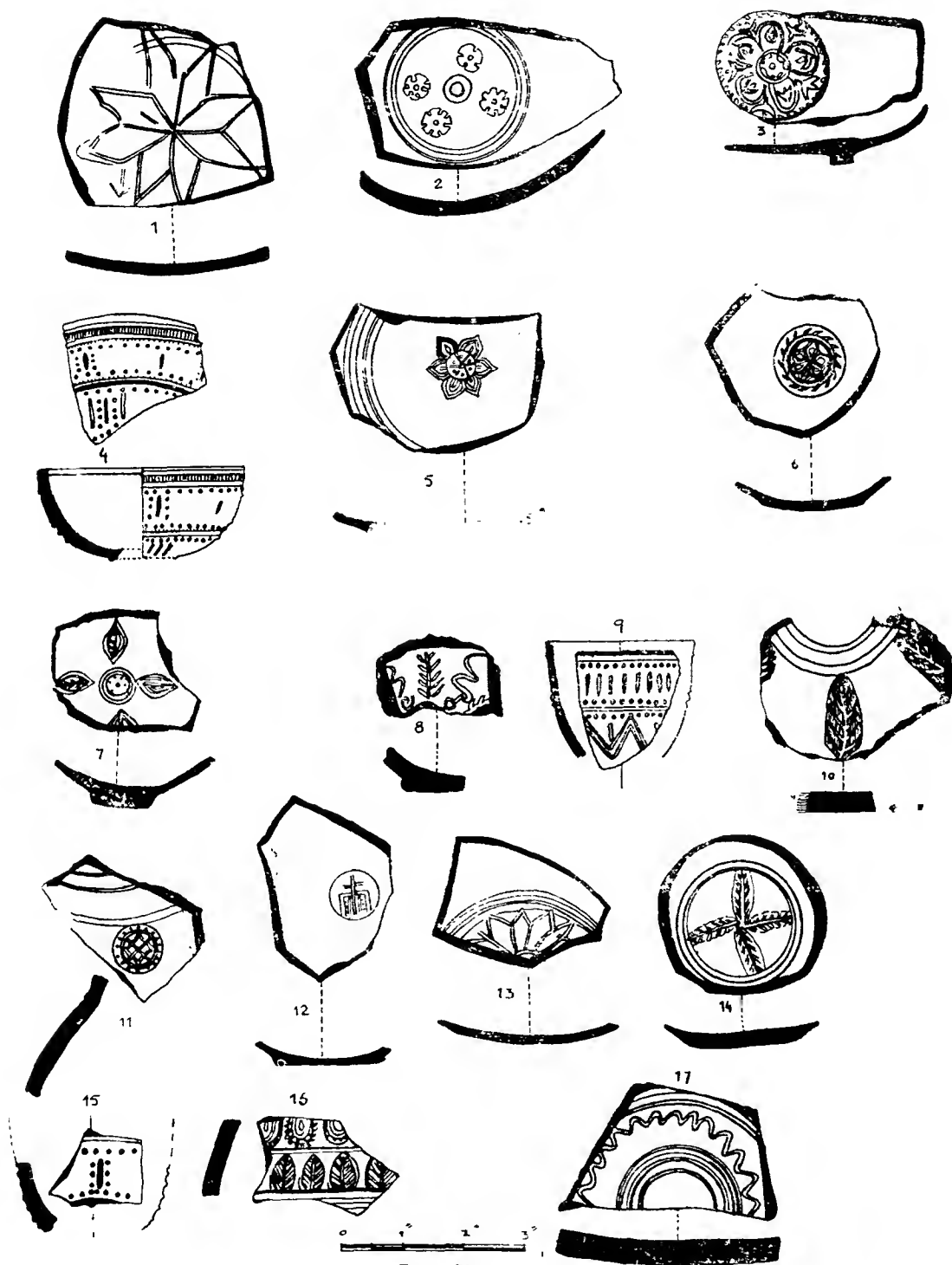


Fig. 57

Type 2. *Bowl.*

3. Large bowl, flat topped and club rimmed, externally grooved and with almost vertical neck, D1 (13).
4. Bowl, flat topped and club rimmed, externally grooved and with more or less straight sides, K 9' (8).
5. Bowl, bevelled incurved rim and thin in section, K 9' (8). See *Ghosh* No. 17.

Fig. 12.

1. Bowl, out-turned rim, hollow pedestal base and internally grooved circle, D1 (12).
2. Pedestal-base of a bowl, the base being hollow and internally and externally grooved, A10' (11).
3. Hollow pedestal-base of a large bowl, K9' (7).
4. Bowl with flat solid disc base, A 11' (9).
5. Bowl having out-turned bent rim with almost tapering rough sides, internally grooved and flat base, D1, (12). It is a new variety of *Ghosh*, Fig. 4 No. 4A.
6. Bowl with out-turned lip and internally grooved, A8' (7).
7. Bowl, incurved flat topped rim, thin in section, K9' (7). It is another variety of *Ghosh* Fig. 4, No. 10.

Type 3. *Incense burner.*

8. Hollow pedestal-base of an incense burner with externally grooved foot-rings A10' (11).
9. Tall hollow pedestal base of an incense burner with raised band in the middle, B1 (16).
10. The carinated cup of an incense burner, grooves on the extended lip, K9' (7).

(C) RED WARE

Red ware is found throughout our excavation from the earliest to the latest levels. Our examples compare fairly well with the fabrics known from Sirkap (see *Ghosh*, PP. 48 ff.) but unfortunately *Ghosh* has not clearly distinguished the different fabrics. Wheeler on pages 39 ff. has separated "soapy red ware" from the ordinary red ware. On our excavation, besides the coarse ware, in which we have large storage jars and other bigger vessels, the red ware is distinguishable into (a) fine fabric (b) medium fabric. The fine fabric ware is made of finely levigated clay with almost no degreassants and is light in weight. It is invariably washed outside and inside with light red and has a polish, which I think, is comparable to the "soapy red ware" of Wheeler. It is possible that Wheeler's ware survives in our period. Fabric (b) is made of finely levigated clay but has some degreassants mixed with it. This ware is thicker and heavier in weight. In the following catalogue we have marked only those that belong to fabric (a).

GREEK LEVEL

Fig. 13.

Type 1. *Thali*.

1. Rim of a thali with tapering sides and incurved shoulder, the rim being beaded and grooved. D1 (13) Compare *Ghosh* No. 24.
2. Carinated thali with sloping sides and sagger base K11' (9).
4. Carinated thali with sloping sides and slightly sagger base K9' (8).
5. Carinated thali with sagger base K9' (8).
6. Thali with incurved rim and sides and flat base B5 (10). This may be compared with Fig. 11 No. 2 but the rim is different.
3. Thali, bevelled rim, incurved sides and sagger base K9' (8). See *Ghosh* No. 22.
7. Thali, bevelled rim, incurved sides and sagger base K9' (7).

Fig. 14.

Type 2. *Bowl*.

1. Bowl externally grooved at the neck, simple incurved rim, tapering sides and sagger base, A 10' (9) See *Ghosh* No. 10 f and *Wheeler* Nos. 77 and 85.
2. Bowl with curved sides, straight pointed rim and flat base A 10' (8) Compare *Ghosh* No. 12.
3. Grooved bowl with incurved rim K9' (8) See *Wheeler* No. 248.
4. Bowl with incurved rim and internally and externally grooved lower down at the body and flat base. K9' (8). See *Wheeler* No. 251.
5. Bowl with incurved rim, externally grooved at the neck and flat base. K9' (7) Compare *Wheeler* No. 249.
6. Bowl with thick flat base and straight rim A8' (8).
7. Bowl with straight rim, externally (single) grooved, fabric (a) K9' (8). See *Wheeler* No. 250.
8. Thin bowl, bevelled rim and externally (double) grooved, fabric (a), A9' (8).
9. Thin bowl with bevelled rim and neck incurved, fabric (a), A1 (15).
10. Thin bowl, hammer-headed rim externally (double) grooved, fabric (a), See *Ghosh* No. 23.
11. Bowl with hollow and flat pedestal base, fabric (a), K9' (7) See *Grey Ware* Fig. 12 No. 2.
12. Bowl with straight neck and simple rim and externally grooved, fabric (a) K9' (8). See *Wheeler* No. 487.
13. Bowl with hollow pedestal base, A9' (7).

Fig. 15

1. Bell-shaped bowl with a flaring rim, grooved shoulder and flat base, K9' (7) See *Ghosh* No. 14a and *Wheeler* No. 486.
2. Tall thin bowl, straightened from shoulder upward, with hammer-headed rim, grooves at the rim and the shoulder, fabric (a) K9' (7).
3. Bowl with high straight neck and externally grooved at the shoulder, fabric (a) K9' (7).
4. Bowl, slightly everted sharp rim and externally grooved, A1 (15).
5. Bowl with incurved rim sharply bevelled, thick section, rough tapering sides and flat base D1 (12) See *Ghosh* No. 10b.
6. Bowl with bevelled rim and grooved shoulder, A1 (11).
7. Bowl with splayed rim sharply bevelled and flat base, A9' (9). See *Wheeler* No. 246 but his example is round based.
8. Simple bowl, tapering sides and flat base B1 (12) See *Ghosh* No. 4C.
9. Bowl, flanged rim, tapering sides and flat base, A11' (9). See *Ghosh* type 5.

Fig. 16

1. Bowl with flaring rim and internally grooved, A3 (7). Compare *Ghosh* No. 2.
2. Bowl with slightly narrow neck and flaring rim. Compare *Ghosh* No. 26, K9' (8).
3. Similar but grooved externally at the shoulder and flat base, A8' (8).
4. Small Bowl with grooved shoulder everted sharp rim and flat base, A3 (9).
5. Bowl with out-turned extended lip and internally grooved, D1 (11).
6. Bowl with broad flat rim K9' (8). Compare *Ghosh* No. 3. but our example is not carinated.
7. Bowl with inturned rim, tapering sides and flat base, A9' (10) See *Wheeler* No. 202 and 208.
8. Bowl with incurved rim and tapering sides, A10' (7).
9. Thin bowl, inturned sharply cut rim and tapering sides, A8' (7).
10. Shallow bowl with everted rim internally grooved and flat base, K9' (8).
11. Tiny bowl, internally grooved and flat base D1 (15).
12. Bowl with flanged rim, thick section and flat base, D1 (11).

Fig. 17

These tiny bowls have not been illustrated earlier either by Wheeler or by Ghosh.

1. Tiny bowl, everted rim and flat base, A11' (10).
2. Tiny shallow bowl, everted rim and flat base, K9' (7).
3. Tiny bowl with everted rim, flat base, straight sides and chamfered corners, I 11' (7).
4. Tiny bowl with carinated shoulder and flat base A 11' (7).
5. Tiny bowl with everted rim straight sides and flat base K9' (8).
6. Tiny bowl, with rim everted and undercut, chamfered corners and flat base K9' (7).
7. Tiny bowl with flat topped rim, grooved shoulder and flat base K9' (7).
8. Tiny bowl with short everted rim and flat base, K9' (8).
9. Tiny bowl with chamfered rim, thin section and flat base D1 (11).
10. Tiny bowl with hammer-headed rim and flat base, K9' (7).
11. Tiny bowl with obliquely expanded rim and flat base, D1 (11).
12. Tiny bowl with flaring rim and flat thick base, K9' (7).
13. Tiny bowl with simple rim, curved sides and flat thick base I 11' (7).
14. Tiny bowl with simple sharp rim and flat thick base A8' (8).
15. Tiny shallow bowl with curved sides, simple rim and flat base, K9' (8).
16. Tiny bowl, simple thick rim and flat base, D1 (11).

Type 3. *Lids.*

17. Lid with a flat topped central knob, D1 (15).
18. Lid with a pointed knob A10' (11).
19. Flat based bowl with a central pointed knob D1 (11).
20. Flat based bowl with a central pointed knob B1 (11).

Type 4. *Torches.*

21. Hollow torch with a solid handle at the base A8' (8). Compare *Ghosh* No. 72.
22. Hollow torch with a handle K9' (8).

Type 5. *Goblet.*

23. Goblet with slightly everted rim and tall sides A1 (15), fabric (a). Compare *Ghosh* No. 54.

Fig. 18.Type 6. *Jar.*

1. Large storage jar with heavy rim. D1 (11).
2. Jar with high neck and vertical flanged rim and externally grooved, K9' (7).
3. Jar with bevelled rim and externally grooved, D1 (12).

Type 7. *Basin.*

4. Thick-walled basin, inturned thickened rim, externally grooved and flat base A6' (7) See *Ghosh* No. 27b.

Type 8. *Stand.*

5. Hollow stand with narrow waist for keeping pots and other objects, B5 (14).

Type 9. *Tiny Pots.*

6. Tiny pot, flat-topped everted rim. A1 (10).

Fig. 19.

1. Small narrow-necked pot with flat base, K9' (7).
2. Tall, narrow-necked, flat base pot A 11' (9).
3. Small pot, externally grooved, out-turned rim and flat base. D1 (11).
4. Tiny pot, bulging body disc base and narrow mouth. Probably ink pot. K9' (8).

Type 10. *Incense burner.*

5. Hollow tall pedestal base of an incense burner, A9' (7).
6. Hollow tall pedestal-base of an incense burner, externally grooved at the base and a carinated cup above it, A9' (9).

Type 11. *Spout.*

7. Spout of a big pot for condensing water, A8' (7) See *Ghosh* No. 73.

Type 12. *Handled Jar.*

8. Handled Jar, externally grooved, narrow mouth and sagger base, K9' (7).

Fig. 20.

- 1 and 1a. Double handled jar, K9' (7).

Type 13. *Water Bottle.*

2. Water bottle with suspension lugs, I 11' (7).
3. Water bottle with two holed suspension lugs, K9' (7).

Type 14. *Handle.*

4. Handle of a bowl.

Type 15. *Decorated Ware* (See also post-script).

5. Lotus impressed at the base of a bowl, B1 (16).
6. Lotus, with double-lined leaves inside a bowl, A1 (15). See *Wheeler* Fig. 10. No. 12, No. 478 and P. 40.
7. Lotus within a circle of a bowl with big and small leaves, B1 (17).
8. Lotus with painted leaves in a circle, A9' (9).
9. Sun flower with painted leaves, K9' (7).
10. Incised wheat plants in a bowl K9' (7).
11. Wheat ears in a circle of a bowl, A 10' (9).

Fig. 40.

2. Shoulder of a water vessel with nail head impressions, D1 (15). See Fig. 40 No. 2.
4. Narrow mouthed small vessel with two rows of nail head decoration, K9' (7), See Fig. 40 No. 4.
7. Flat based small bulging pot with a series of concentric circles at the shoulder, K9' (7), See Fig. 40 No. 7.
13. Fragment of a dish with a series of design between two grooved lines on the rim. The design consists of a stylised body with a head, D1 (12), See Fig. 40 No. 13.
12. Fragment of a dish with the same design as in No. 15 above K9' (7). See Fig. 40 No. 12.
17. Fragment of a water bottle with holed lug with the design at the exterior. The design takes the form of concentric circles enclosing a rosette within and a sinuous garland with floral motifs at the outside. Similar bottles have been found in the Scytho-Parthian level. K9' (8), See Fig. 40 No. 17.

Fig. 21.Type 16. *Painted Ware.*

The painting is black on red. It is done with a thick brush. The background is reddish buff.

- 1 and 1a. Fragment of a red bowl painted with hatched triangles ending in spiral hook on the rim, K9' (7).
- 2 and 2a. Bowl painted with blobs on the rim, and two registers on the shoulder, the upper one having a series of zigzag lines and the lower one triangles, K9' (7).
3. Sherd with black painted dots, B5 (11).

- 4 and 4a. Bowl, with painted rim having hatched double triangles ending in curved hooks, K9' (7).
- 5 and 5a. Bowl with black painted triangles on rim K9' (7).
- 6 and 6a. Bowl with black painted rim, K9' (8).
- 7 and 7a. Bowl with rim having black painted curved hooks and a row of dots within double lines, K9' (8).
- 8 and 8a. Rim of a bowl with black-painted lines, K9' (8).
- 9 and 9a. A jar with painted lines on rim D1 (15).
- 10 and 10a. A jar with black-painted lines, thick dot on rim, A1 (11).
- 11 and 11a. A bowl having its rim painted with hatched triangle ending in curved hooks, K9' (8).
- 12 and 12a. Sherd with criss-cross design on rim, B5 (11).
- 13. A jar with black-painted lines and floral design at the shoulder, K9' (8).
- 14 and 14a. A bowl with black painted triangles on rim and floral design at the base, K9' (7).
- 15. Tiny pot with black painted criss cross design on the shoulder, A 10' (8).
- 16 and 16a. Base of a bowl with black painted floral design in the centre, K9' (8), probably like No. 14.

SCYTHO-PARTHIAN PERIOD

GREY WARE

Fig. 22.

Type 1. *Thali*.

- 1. *Thali* with grooved circles around the central knob and flat base, A5 (5).
- 2. Flat based *thali* with flaring rim, the interior having groove and leaf decoration A9' (5).
- 3. Flat based *thali* with leaf decoration between grooved circles, A9' (5).
- 4. *Thali* with flanged rim vertically cut, grooved circles on rim and a series of solid triangles below it, BO (10).
- 5. Carinated *thali* with out-turned rim internally grooved and having incised decoration, A3' (6).

6. *Thali* with bevelled and externally grooved rim, central knob and sagger base A7' (5).
7. *Thali* with grooved circle on top of everted rim, flat base A9' (6).
8. *Thali* with everted rim and internally grooved, A10' (6).

Fig. 23.

1. Carinated *thali* with out-turned grooved rim and sagger base, A7' (5).
2. Carinated *thali* with flanged and grooved rim, internally grooved circles and flat base, A5' (6).

Type 2. *Bowl*.

- 3a & b. Large bowl having applied handle with out-turned rim and grooved top and shoulder, D1 (10).
4. Large bowl, with hammer-headed rim, externally grooved and almost vertical neck, compare *Wheeler* No. 480. See also Fig. 11. No. 3.
5. Large bowl, flat topped rim, externally grooved and almost vertical neck, A9' (6).
6. Large bowl having hammer-headed rim, externally grooved and slightly tapering neck, A6' (5).
7. Large bowl with flat topped rim, externally grooved, A9' (6). See *Wheeler* No. 488.

Fig. 24.

1. Bowl with out-turned rim rough tapering sides internally grooved and flat base, A1' (5) See *Ghosh*, No. 4 b.
2. Bowl with curved rim, rough tapering sides, internally grooved and flat base, A9' (6) See also Fig. 12 No. 6 and *Ghosh* No. 4a.
3. Bowl, with out-turned rim internally grooved and flat base, A7' (6). See *Ghosh* No. 4d. This variety of bowl, along with Nos. 4 and 5 below, is also found in redware. Baskets of these bowls were found in A7' (6) buried in one place.
4. Bowl, with out-curved rim, internally grooved, circle at the flat base, A 10' (6).
5. Bowl, with out-turned rim and rough flat base. A7' (8) Greek.
6. Shallow bowl, with out-turned rim, internally grooved and flat base, A8' (6).
7. Bowl, with vertically raised and grooved rim, curved sides, and flat base. A5' (5).

8. Bowl, with flaring rim, internally grooved and flat base, A5' (5).
9. Bowl, with out-turned rim and internally grooved, A4' (5).
10. Bowl with simple rim, D1 (5A). See *Ghosh* No. 12.
11. Bowl, slightly incurved rim, and tapering sides, A10' (5).
12. Bowl, with grooves on top of rim and externally grooved below the rim, A4' (6).
13. Bowl, with grooves on top of flanged rim, A9' (6).
14. Bowl with grooves on top of rim, A10' (5).
15. Bowl with bevelled rim EO (5A).
16. Bowl with slightly out-turned rim and tapering sides, A9' (6).
17. Lower part of a big bowl, with flat base, A6' (6).

Fig. 25.

1. Pedestal base of a large bowl, hollow inside, A6' (6). Such pedestal bases are also found in red ware.
2. Hollow, stepped pedestal base of a large bowl A11' (5).
3. Ring pedestal base of a large bowl A9' (6).
4. Pedestal base of a large bowl, base having sides up and hollow, A6' (6).
7. Pedestal base of a bowl, externally grooved, K9' (6).
8. Bowl internally and externally grooved with a ring base, A 10' (6).

Type 3. *Incense Burner.*

5. Hollow pedestal base of an incense burner, A10' (6).
6. Flat stepped, pedestal base of an incense burner A7' (5).

Type 4. *Jar.*

9. Globular jar with grooved neck, A7' (5).
10. Tiny globular jar with grooved neck, K9' (6).
11. Jar with flat topped, out-turned rim and grooved shoulders D1(5B)).
12. Jar with slightly vertical flanged rim, A6' (5).
13. Dark grey jar, externally grooved rim and shoulder, A6' (6).
14. Jar with flat and externally grooved rim and applied handle, A6' (6).
15. Tiny jar with grooved shoulder, A4' (5).

16. Jar, flat and externally grooved rim, applied handles and flat base, A12' (5).
17. Sherd of a big jar with handle and grooves below, A6' (6).

Type 5. *Cup*.

18. Cup, externally grooved and sagger base A2' (5).

RED WARE

In this period the bulk of red ware belongs to medium fabric, the clay of which contains some degraissants. The vessels are generally dull washed inside and outside. The coarse fabric ware has large storage jars, torches and other bigger vessels. We also have a smaller number of fine ware found in the excavation. This ware, though made of finely levigated clay and is also light in weight, yet it is not the same as the fine fabric (a) ware of the Greek period. Here we do not get the soapy red polish, though externally and internally it is dressed with red slip. The forms are also entirely new in this ware. It may therefore be suggested that it belongs to a new tradition.

Fig. 26.

Type 1. *Thali*.

1. Flat based *thali* with the sides turned outward and squarish rim, has dull red slip, A9' (6).
2. Flat based *thali* with sloping sides and everted rim, red washed, A5' (6).
3. *Thali* with slightly sagger base, sloping sides and flat topped rim, incised circle on the inward base, A10' (5).
4. Flat based *thali* with incurved sides and bevelled rim, A6' (6).
5. Flat based *thali* with incurved sides and rim externally grooved, the inner base has raised circle in the middle, A10' (5).
6. Flat based *thali* with slightly incurved sides, A9' (5).
7. Flat based *thali* with sloping sides and rounded rim, 111' (5).
8. *Thali* with bevelled rim, D1 (10).

Fig. 27.

1. Flat based *thali* with outward sides and grooved rim, having incised circles on the inner base, A6' (6). It is a variant of fig. 26 No. 1.
2. Sagger based *thali* with out-curved sides and the rim having a decorated frieze between two grooves, A6' (6).
3. Flat based *thali* with tapering sides and flat topped rim with grooves at the margin of the inner base, A2' (6).

4. Carinated *thali* with triangular rim, A11' (6).
5. Sagger based *thali*, incurved sides and bevelled rim. It is a variant of Fig. 26 No. 4. A6' (6).

Fig. 28.

Type 2. *Saucers.*

1. Flat based saucer with a raised circle on the base and flat topped rim, A5' (6).
2. Saucer with disc base and grooved circle inside the base and concavely flat rim, BO (6).

Type 3. *Shallow Bowls.*

3. Bowl with flat topped rim, I 11' (6).
4. Shallow bowl with disc base and flat topped rim, A7' (5).
5. Bowl with grooves inside and at the outside of the flat base, A5' (6).
6. A small disc based cup with everted rim, A8' (5).
7. A flat based bowl with tapering sides and incurved rim, rather of coarse fabric, A7' (5).
8. Sagger based bowl with outcurved rim, thin in section and light in weight, A6' (6).
9. A pedestal based cup with outcurved rim, A10' (6).
10. Fragment of a bowl with incurved rim and grooved outside, A5' (5).

Type 4. *Deep Bowls with Flaring Rim.*

11. Deep bowl externally grooved with flaring rim of fine fabric A5' (6). This form is a survival of the forms seen in Greek period, of Fig. 16. No. 3.
12. Larger variety of bowl number 11. B1 (7).

Type 5. *Drinking Bowls.*

13. Flat based deep drinking bowl with bevelled rim, K9' (6). These drinking bowls are found in all the levels of Shaikhan Dheri. This form is comparable with the one in the Greek period Fig. 15 No. 7.
14. Flat based deep drinking bowl with a straight pointed rim A10' (6) Cf. Greek period Fig. 14 No. 2.
16. Flat based drinking bowl with incurved rim.

Type 6. *Lipped Bowl*.

15. Bowl with extended lip, turned outward and curved sides, B0 (6). It is comparable with Greek form Fig. 16. No. 5.

Fig. 29.

Type 7. *Large Bowls*.

1. Rim of a large bowl, squarish in section, externally raised band, A9' (6).
2. A deep bowl with flaring rim A9' (6).
3. Bowl with incurved rim, externally grooved, A9' (6).
4. Bowl with curved sides, externally grooved and everted rim A9' (5).
5. Large bowl with incurved clubbed rim, sides externally grooved, I11' (5).

Fig. 30.

1. A smaller variety of Fig. 29 No. 5. A6' (6).

Type 8. *Gamla shaped Bowl*.

2. Shallow bowl, *gamla* shaped, used for flower pot, has flat base and scourings just below the rim, A10' (6).
3. Large *gamla* type bowl with incurved rim and flat base, A10' (6).
4. *Gamla* type bowl with curved sides, flat base and flat topped rim, A12' (5).

Type 9. *Incense Burners*.

Earlier we have illustrated (Fig. 25 Nos. 5 and 6) bases of incense burners in grey ware. In red ware we also find great number of this form. Some are solid pedestal bases. Others are hollow pedestal bases. Here we illustrate only two examples.

Fig. 31.

11. Tall pedestalled base, hollow inside, has brownish red slip both inside and outside, A3' (6).
13. Cup of an incense burner with flaring rim, light red in texture, A6' (6).

Type 10. *Drinking Goblet*.

12. Pedestalled base drinking goblets with a high rim. It is of light red texture, A7' (5). Compare *Ghosh* No. 55.

Type 11. *Bottle Necked Small Vases.*

These are obviously meant for storing liquid. Nos. 2 and 3 were probably used as inkpots. Under this very head we have included No. 5 which is spouted and handled but its mouth is large. Similarly No. 6 is a type by itself. The bottle shaped ones can be compared with *Ghosh* Fig. 14, No. III.

1. Flat based, straight sided and bottle necked inkpot, has grooves externally, fired red, A2' (6).
2. Upper part of a bottle necked inkpot with grooves at the shoulder and the neck, red slip applied externally, thin in section, A2' (6).
3. Narrow mouthed, flat based vase with bulging body, red washed, A2' (6).
4. Similar to No. 3 but the body is still more bulging, A10' (5).
5. Bottle necked small pot, rather thick in section, A6' (6).
6. Flat based handled pot with little spout, handle broken, A11' (6).
7. Sagger based little pot with sloping sides, A6' (5).

Fig. 32.Type 12. *Kneading Trough.*

These are large sized, flat based troughs, usually employed either for kneading dough or for washing clothes in this area. *Wheeler* (Nos. 367 and 368), describes them as cooking trays.

1. Handled trough with grooved rim of coarse fabric, A9' (6).
2. A trough with sloping sides of coarse fabric, I 11' (6).
3. A trough having a flat topped rim, sides slightly tapering, A9' (6).

Type 13. *Handles.*

4. Handle attached to the middle of the pot by pressing it to the side, A 11' (6).
5. A handle attached to the top of the rim, A6' (6).
6. An ear-shaped handle attached to the side, A10' (5).
7. Broken handle rectangular in section, A1 (7).
8. A holed lug attached to the side, A6' (6).
9. A handle attached from the rim of the pot to its shoulder, A10' (6).
10. A solid handle with numerous knobs at the end, K9' (5).
11. A solid handle with incised side wings and head, A6' (6).

Type 14. *Small Water Jars.*

Fig. 33.

1. Narrow mouthed, flat based jars (*Badna* type)) having bulging body, a spout and a handle. The shoulder is decorated with a ziz-zag line between two incised lines, A7' (5).
2. A squat *Lota* shaped jar with grooves at the neck and on the body, red slipped externally, A10' (6).
3. A narrow mouthed, flat based jar with bulging body, probably of the shape of a *surahi*, A12' (5).

Type 15. *Spouts.*

4. A large spout, A9' (6).
5. A small spout of water jar, I 11' (6).
6. A spout with fine holes, A7' (5).

Fig. 34.

Type 16., No. 1.

It is a large water vessel with a single spout to one side, the vessel being made in two parts and luted together. In many of the cases of the Kushana period there is a seal impression just below the spout. This type is found in all the levels of our excavation. In the house of Naradakha this vessel was found along with storage jars placed on a platform. It seems that it was used as a liquid measure. D1 (9). For other opinions see *Ghosh* No. 73.

Type 17, No. 2.

Lower part of a tall vessel with flat base and slightly sloping sides. It occurs in all the levels, A2' (5). For examples in Kushana period see Fig. 54, No. 7.

Type 18, No. 3.

Spout of a water distiller with grooves at the spout and buttons below the spout, A10' (5).

Fig. 35.Type 19. *Large Basin.*

1. Large basin with club-shaped incurved rim and sloping sides having grooves, A 11' (6).

Type 20. *Water tank with Lamps.*

4. Part of a water tank with two little lamps on the rim, the tank being flat-based, A9' (6).

Type 21. *Storage Jars.*

2. Rim of a large storage jar, the rim being squarish, with a

prominently raised line at the neck externally, material coarse and gritty, K10' (5).

3. Flat-topped rim of a storage jar with two raised lines at the neck and a groove at the shoulder, I 11' (5).

Fig. 36.

5. Flat topped squarish rim of a water vessel with a plain neck, A9' (6).
6. Vertically cut rim of a small water vessel made of fine levigated clay, red slipped I 11' (6).
7. Chamfered rim of a water vessel with two grooves externally at the neck, D1 (7).
8. Negligible rounded rim of a water vessel with a series of holes at the neck, made of coarse material, A5 (6).

Type 22. *Decorated Jar with Impressed Designs.*

1. Chamfered rim of a big water vessel with grooves below the neck and below them three slanting impressed lines by the side of a small knob, made of coarse material, red slipped externally, B1 (6).
2. Neck and shoulder of a water vessel with beautifully impressed design on the shoulder below double raised lines. It consists of double sinuous garland with concentric circles in between the curves underlined by a row of wedges below, A6' (6).
3. Rim of a water vessel with plain neck and two rows of nail head decoration below the neck, B0 (6).
4. Rim of a water vessel with plain neck and a series of *swastikas* between two lines at the shoulder and a further series of nail heads below, D1 (8).

Fig. 37.

1. A small water vessel with a plain neck and everted rim, decorations just below the neck, consisting of a series of floral circlets impressed below double grooves and a line of nail heads below A 11' (5).
2. A small water vessel with plain neck and everted squarish rim with decorations just below the neck, consisting of a series of impressed circles between two grooved lines. Within the circle is a double arch, one within the other, A2' (5).
3. Similar to No. 2 but the rim is flat topped, and the decoration consists of a rosette within a circle between a raised line above and a groove below, A2' (5).

4. Similar to No. 3 above but rim broken, and the decoration consists of concentric circles alternating with two nail heads, A2' (5).
5. Similar to No. 4 above, and the decoration also same but no nail heads occur here, A5 (6).
6. Collared rim of a water vessel with impressed design on the exterior of the rim, consisting of a series of concentric circles, A4 (5).
7. A water vessel with everted rim, externally flat and stepped, and decoration below the neck, consisting of circles with tree-motif alternating with cross motif.

Fig. 38.

1. Neck of a water vessel with a series of eye-impressions between two lines at the shoulder, A4' (5). Early Kushana period.
2. Neck of a water vessel with the impression of the sun around the shoulder, below which is a series of nail heads, B5 (5).
3. Shoulder of a water vessel with a series of foot impression, A1 (6).
4. Shoulder of a water vessel with a cup impression between two lines, D1 (8).
5. Shoulder of a water vessel with a series of wheat impression at the shoulder between two lines, below which are nail head impressions, A11' (5).
6. Shoulder of a water vessel with a similar design as in No. 5 above, I 11' (5).
7. Shoulder of a water vessel with a series of leaf impression above nail heads, A 11' (5).
8. Shoulder of a water vessel with a series of impressed stalk between two lines, A9' (5).

Fig. 39.

1. Shoulder of a water vessel with a design between two grooved lines, consisting of a series of concentric circles above sigmas, A4 (5).
2. Neck of a water vessel with a design between two lines, consisting of a series of two concentric circles with dots within and a line of nail heads, B0 (6).
3. Neck of a water vessel with a series of circles, each sub-divided into four compartments, D1 (7).
4. Shoulder of a water vessel with a design between two grooved lines, consisting of ovals, one with leaf impression alternating with palm impression A10' (5).

5. Shoulder of a water vessel decorated with triple concentric circlets, B0 (6).
6. Shoulder of a water vessel decorated with nail heads and a series of circles, subdivided into four sub-compartments each having a dot, B5 (6).
7. Shoulder of a water vessel decorated with a series of circles between two nail head impressions, one circle with four petal flower alternating with concentric circles, A9' (5).
8. Shoulder of a water vessel with a circle design below nail heads, each circle having a number of dots, A9' (5).
9. Shoulder of a water vessel, red slipped, having three rows of nail heads above two grooved lines, A10' (6).
11. Rim of a water vessel with its shoulder decorated with a series of concentric circles between two lines of nail heads, A9' (6).
13. Shoulder of a water vessel with a similar design as in No. 11 above, A1 (8).
10. Rim of a water vessel with a plain neck and a line of nail heads between two raised lines of the shoulder, D1 (5). Middle Kushana period.
12. Rim of water vessel with similar design as in No. 10 above, D1 (5). Middle Kushana period.

Fig. 40.

1. Rim of a water vessel with a nail head decoration at the shoulder, A4' (5).
3. Shoulder of a water vessel with a series of double impressed squares above the grooved line and a compartmented circle below, A1 (6).
6. Fragment of a water vessel with a series of lobed pentagon containing five petal flower and nail head impression above and below it, D1 (8).
7. Fragment of a handle with an applique decoration bearing further impressions, I 11' (5).
9. Fragment of a *thali* (dish) with leaf impression within concentric lines, K9' (6).
10. Miniature pot, red slipped with a series of triangles between two rows of dots, A1 (8).
11. Fragment of a vessel with a rows of palm impressions and a line of dots, A11' (6).
14. A saucer having concentric groove circles on the rim and inside

with an elaborate horned head probably of a ram (much stylised), A9' (6).

15. A miniature liquid bottle with holed lugs on the side having designs within concentric circles on two faces. The central design consists of rosettes and the second design is a circle of triangles, A 11' (5).
16. Similar to No. 15 above but design some what varies. The central motif remains the same but the second circle includes duck, goose, and turtle occurring in order, A11' (5).

Fig. 41.

- 1a and 1b. A large sized water (or wine) bottle (flagon) with holed lugs on the sides, as Nos. 15 and 16 above. The two faces have an elaborate decoration in high relief, all the designs moving in concentric circle around a sun flower in the middle. Next circle is that of petals, beyond which is a series of sun flower alternating with petals. Next circle is a series of four animals: lion and deer face to face with a hooked *swastika* in between them. Further beyond we find on one side a winged lion having beak and on the other side a humped bull, A10' (6). See picture on the back cover.

Fig. 42.

The following selected examples are given to show bowls impressed with lotus, sun flower and wheat motif. These motifs are great favourites of the people of Pushkalavati. The first motif may follow from the very name of Pushkalavati meaning the *Lotus City*. The second motif may indicate the abundance of wheat production in the alluvial soil of Charsada.

1. Bowl impressed with lotus motif showing a central circle with dots and five oval petals, each one of which joined by triangular pattern, A7' (5).
2. Similar to No. 1 but the design is smaller, A6' (6).
3. The bowl impressed with sun flower within grooved circle, A10' (6).
4. Similar to No. 3 but the flower is well formed, A7' (5).
5. Bowl impressed with wheat corn within double grooved circle, I 11' (5).

Fig. 43.

Painted sherds are not very common in the Scytho-Parthian period. A few examples have been found. The painting is the continuation of the earlier period. We have here red background on which black paint is applied with a brush.

1. Shoulder of a water jar with a line of blobs below regular lines in between which further blobs and triangles are seen, A5 (7).

2. Rim of a vase with a plant motif on the side, across which is a firm black line and short lines on the rim, A2' (6).
3. Shoulder of a water vessel with emerging rays below the neck and hatched lines on the shoulder, A7' (5).
4. Fragment showing three horizontal lines, I 11' (6).

KUSHANA PERIOD

As this period was of short duration for about hundred years, it has not been possible to detect any evolution in the pot forms of the three sub-periods of the Kushanas. The pottery is therefore described here as falling in one group. The description follows the same pattern as given in the earlier periods. The ware, both grey and red, is of the same nature as we found in the Scytho-Parthian period. Many common examples have not been drawn here. Only select specimens are illustrated and catalogued below with a view to throwing light on the pottery tradition of this whole period.

GREY WARE

Type 1. *Thali*.

Fig. 44.

1. Flat based *thali* with tapering sides and outcurved rim, grooved inside, A7' (4).
2. Flat based *thali* with outcurved sides and slantingly cut rim, A8' (4).
3. Flat based *thali* with slightly incurved sides, flat topped rim grooved externally A8' (4).

Fig. 45.

1. Round bottom *thali* with sloping sides and flat rim grooved externally, A7' (3).
2. Flat based *thali* with curved sides with squarish rim, incised circle on the inner base, A7' (3).
3. Slightly sagger based *thali* with outcurved sides and rounded rim, incised concentric circles within, A12' (3).
4. Flat based *thali* with little raised outcurved sides, grooved rim, incised circle within, J11' (2).
5. Flat based *thali* with incurved sides, J11' (3).
6. Flat based *thali* with incurved sides and rim grooved externally, A9' (3).

Fig. 46.

16. Base of a *thali* with a central knob, A6' (4).

Fig. 48.

1. Flat based *thali* with incurved sides, rim having double grooves externally, B1 (1).
3. Flat based *thali* with outcurved sides, grooved internally, D1 (3).

DECORATED THALIS

Fig. 45.

7. Base of a *thali* showing triple grooved circle and stylised foot impression, A8' (1).
8. Base of a *thali* with a grooved circle, within which are geese within circle, below which are further impressions, CO (2).
9. Base of a *thali* with leaf motif around grooved circles, A5' (1).

Type 2. *Bowls.*Variety I. *Shallow Bowls with Flat Base.*

This variety is a continuation of the one seen in the Scytho-Parthian period.

Fig. 46.

1. Shallow bowl with tapering sides and everted rim, scoured inside, A8' (4).
2. Similar to No. 1 above but rim slightly flaring, scoured externally just above the base, A8' (4).
3. Small shallow bowl with everted rim, scoured internally, A8' (4).

Fig. 47.

1. Shallow bowl with extended lip, grooved inside, A8' (3).
2. Shallow bowl with everted rim grooved internally, A12' (3).

Variety II. *Shallow bowl with outcurved rim.***Fig. 46.**

4. Disc based shallow bowl with outcurved rim, rim grooved internally, K11' (4).
5. Disc based saucer-shaped bowl with outcurved lip, A6' (4).
9. Disc base of a big bowl luted later to the hollow base of the bowl, A5' (4).
10. Disc base of a bowl with a slight knob in the middle, A6' (4).

Fig. 47.

3. Rim of a disc shaped bowl with outcurved rim, has a shiny surface both internally and externally A1 (2).
4. shallow bowl with tapering sides, outcurved rim, which is cut slantingly outside and grooved internally, D1 (5).
5. Disc based shallow bowl with outcurved rim, A7' (3).
6. Round based shallow bowl with flat rim, having extended lip, A 11' (3).

Variety III. *Bowl with incurved sides.*

Fig. 46.

6. Fragment of a bowl with grooves on the rim, K11' (4).
7. Fragment of a bowl with bevelled rim, grooved externally, D0 (3).

Fig. 47.

7. Fragment of a bowl with bevelled rim, A3 (2).

Fig. 48.

2. Fragment of a bowl with flat topped rim, D0 (3).

Variety IV. *Bowl with a long straight neck.*

Fig. 46.

8. Neck of a bowl with flat rim, grooved externally, A7' (4).

Fig. 47.

8. Neck of a bowl with flat topped rim, scoured externally, A8' (3).

Variety V. *Pedestalled Base Bowl.*

Fig. 46.

11. Ring shaped pedestal of a bowl, hollow inside, A 10' (4).
12. Hollow pedestal of a bowl, A11' (4).
14. Hollow pedestal of a bowl, A7' (4).

Fig. 47.

9. Hollow pedestal based bowl with outcurved rim, A11' (3).
10. Hollow pedestal of a bowl, J8' (3).
11. Footed pedestal of a bowl, hollow inside, J8' (3).

Fig. 48.

4. Solid pedestal of a bowl, D1 (3).

Type 3. *Incense Burner.*

Fig. 46.

13. Stepped pedestal of an incense burner hollow within, A4' (4).

Type 4. *Lota shaped Jar.*

Fig. 44.

Variety 1. *Double handled jar.*

4. Long necked bulging jar, having flat topped rim, grooves on the body, handles joined from the neck to the shoulder, A8' (4).
5. Jar with grooves at the shoulder, handles joined from the neck to shoulder, A12' (4).

Variety II. *Spouted Jar.*

8. Simple spout of a jar, A4 (4).

Variety III. *Narrow mouthed lota.*

6. Disc based, narrow mouthed lota with bulging body, grooved rim with a line of nail heads at the neck, A7' (4).
7. Grooved rim of a small lota A6' (4).

Fig. 47.

12. Narrow necked lota with flattish rim and grooved externally, I 10' (3).
13. Rim of a lota slantingly cut externally, A5' (2).

Fig. 48.

5. Externally grooved rim of a lota, E0 (3).
6. Flared rim of a lota, E0 (3).

Type V. *Decorated Grey Sherds.*

Fig. 45.

10. Sherd with applied decoration at the exterior showing two scenes separated by double row of brackets. The left scene shows a dancing girl in active dance between two lotus flowers. The right scene shows part of a lady seated cross legged with concentric circles and petals around her E1 (4a) Pit 2.

Fig. 46.

15. A sherd with a row of concentric circles between double lines A0 (4).

RED WARE

Fig. 48.

Type 1. *Thali* (Dish).

7. Flat-based *thali* with sloping sides and rim almost rounded, E0 (3).
8. Sagger-based *thali* with tapering sides and the corners chamfered, E0 (3).

Fig. 49.

1. Flat-based *thali* with sloping sides and everted rim, grooved internally on the base, A5 (4).
2. Flat-based *thali* with incurved sides and grooved rim, D1 (6).
3. Flat-based *thali* with incurved sides, grooved flattish rim and also sides externally grooved, D1 (5B).
4. Flat-based *thali* with curved sides and bevelled rim, having further grooves externally, A4' (5).
5. Sagger-based *thali* with incurved sides, bevelled rim and grooved outside, A7' (5).
6. Flat-based *thali* with incurved sides and bevelled rim, A6' (5).
7. Flat-based *thali* with curved sides, slanting notched rim and grooved outside, A4 (5).

Fig. 50.

1. Flat-based *thali* with outcurved sides having a zigzag pattern on the interior of the side and a floral pattern (partly preserved) within grooved circle on the base, A6' (4).
2. Flat-based *thali* with outcurved sides, A5' (4).
3. Flat-based *thali* with almost straight sides, everted rim and grooved circle on the base, A9' (4).
4. A plate with raised rim and holes at the base, A7' (4).
5. A *thali* with tapering sides, having externally raised line and holes at the base, A7' (4).
6. A deep *thali* with a central hollow knob, sloping sides and traces of handle on the rim, A7' (4).

Fig. 53.

1. Flattish *thali* with flat rim, convex base ,compartmented into three circular spaces, D1 (1).

Type 2. *Bowl.*

Variety I. *Flat based shallow Bowls with sloping sides.*

Fig. 48.

12. Bluntly carinated shallow bowl with flaring rim, D1 (3).
13. Small bowl with rough sloping sides, E0 (3).
14. Small bowl with thick sides and base, rim slightly tilted outside, D1 (3).
15. Shallow bowl with a knob inside, probably used as a lid, F0 (3).
16. Shallow bowl with a flattish knob inside, B2 (1).

Fig. 52.

1. Flat based bowl with outcurved rim, grooved at the base internally, A2 (5).
2. Flat based bowl, slantingly cut rim, A6' (5).

Fig. 53.

5. Flat based bowl with curved sides and vertically cut rim, E1 (3).

Variety II. *Flat based bowl with sides curving inward.*

Fig. 48.

10. Bowl with simple straight rim, E0 (3).

Fig. 51.

6. Bowl with rough sides and bevelled rim, K9' (4).
7. Bowl with disc-shaped base, almost straight shoulder and lipped rim, A12' (4).
8. Common drinking bowl with a straight up rim, A8' (4).
10. Bowl with disc-shaped base, having a central knob inside and grooved rim, B1 (5B).

Fig. 52.

4. A small cup like bowl with straight shoulder, A8' (4).

Variety III. *Flat based bowl with sloping sides and straight shoulder.*

Fig. 48.

9. **Fragment** of a bowl with simple rim, shoulder slightly tapering F1 (3).

Fig. 51.

1. Deep shallow bowl with bevelled rim, A5' (4).

Variety IV. *Round based bowl.*

Fig. 48.

11. Regularly curved bowl with simple rim, F1 (2).

Variety V. Fig. 51. No. 9. Flat based bowl with slanting sides, externally grooved and rim almost flat, A8' (4).

Variety VI. *Rim fragments of bowl.*

Fig. 51.

4. Rim of a bowl, externally grooved and notch on the top, A8' (4).
5. Rim of a bowl grooved on the top and further grooved on the neck, D0 (5A).

Fig. 53.

2. Rim of a bowl with almost straight neck and grooved rim, EO (1).

Variety VII. *Gamla shaped bowl.*

Fig. 53.

3. Flat based deep bowl with flattish rim and slightly incurving sides E0 (1).
4. Rim of a deep bowl, flat on the top end, grooved neck, C0 (1).

Variety VIII. *Flat based bowl with flanged rim.*

These bowls are of finer texture but not so good as we find in the Scytho-Parthian period.

Fig. 51.

2. Deep bowl with curved sides and grooved at the shoulder, rather thin in section, D1 (5).
3. Deep bowl, grooved at the shoulder, thin in section, A9' (4).
11. Small cup like bowl with straight shoulder, grooved externally, thin in section A8' (4).

Fig. 52.

3. A cup like bowl with slanting shoulder rather thick, C0 (2).

Fig. 54.

2. Cup shaped bowl, grooved externally, K11' (3).
4. Bowl with flanged rim, A9' (3).
5. Bowl with almost straight shoulder externally grooved, K10' (2).
6. A shallow bowl with grooved rim, which has lost its flange J8' (3).

Variety IX. *Pedestal Based Bowl.***Fig. 52.**

8. Goblet shaped bowl with hollow pedestal and sides having parallel red lines applied on orange coloured surface, very thin in section, A12' (4).
9. Similar to No. 8 above, pedestal having a groove on the side, red slipped, very thin in section, A7' (4).
10. Ring shaped pedestalled bowl, red slipped, very fine, A6' (4).

Type 3. *Goblet with a knob at the bottom.*

11. Lower part of the goblet, red slipped, extremely fine, A8' (4).

Fig. 31.

9. Goblet with flanged rim and fluted sides at the lower half with a raised band at the shoulder, red slipped, very fine in texture, A2' (6). Parthian.
10. Fragment of a goblet, poor in workmanship, A6' (5).

Fig. 31.Type 4. *Glass*

8. Straight sided flat based drinking glass, A4' (5).

Type 5. *Incense Burner.***Fig. 52.**

5. Solid pedestalled incense burner with a cup having extended lip, D1 (5).
6. Hollow pedestalled incense burner with a cup having outcurved sides, A8' (4).
7. Cup of an incense burner with outcurved rim, A7' (4).

Fig. 53.

8. Solid pedestalled incense burner with a cup, similar to No. 6 above, E0 (3).

Type 6. *Pedestalled Cups.*

6. Solid pedestalled cups with tapering shoulder, E1 (3).
7. Solid pedestalled cup, luted at the waist, the shoulder of the cup sloping and rim flat, C1 (1).

Type 7. *Lota-shaped Jar.***Fig. 55.**

1. Jar with bulging body, squarish rim and flat base, A3' (2).
2. Flat-based jar with sloping sides at the lower end and bulging in the middle and rim flaring. A8' (4).

Fig. 54.

3. Rim of a jar, grooved externally, A8' (3).

Type 8. *Narrow-mouthed small pots.***Fig. 52.**

12. Flat-based pot grooved externally, and rim sharply pointed, D1 (5B).
13. Disc-based pot with extremely bulging body and grooved rim, red-slipped externally, A8' (4).
14. Flat based pot with a bulging body with no neck at all, A3 (4).
15. Flat-based pot, groove at the bulging body and pointed rim, D1 (5a).
16. Flat-based pot with a bottle-neck, D1 (5a).
17. Pot with a bulging body and bottle neck, red-slipped externally, A4 (4).

Type 9. Fig. 54, No. 1. It is a large water vessel with a spout of the same type as illustrated earlier. See Fig. 34 No. 1. A2 (5).

Type 10. Fig. 54, No. 7. Complete specimen of a tall vessel with flat base, similar to fig. 34, No. 2. B2 (2).

Type 11. *Handles.***Fig. 55.**

3. Handle of a bulging vessel attached at the shoulder, A4 (5).
4. Ridged handle attached to the top of the rim of a basin, K9' (2).

5. A handle applied at the shoulder of a red slipped water vessel, A10' (1).
6. A handle attached from the rim to the neck of a vessel, J10' (1).
7. A handle attached to the shoulder of a vessel. Similar to No. 3 above. A6' (3).

Type 12. *Storage Jar.*

Fig. 56.

1. Clubbed rim of a storage jar grooved externally and a zigzag line between the grooves, A8' (4).
2. Rim of a storage jar, flat topped and a raised band at the neck, A4' (4).
3. Flat topped rim of a storage jar with grooves at the neck, A4' (4).

Type 13. *Decorated Ware.*

Fig. 42.

6. Impressed decorations at the inner base of a flat based vessel, consisting of a rosette in the middle with smaller rosettes around, A8' (4).
7. Rosette impression at the base of the pot, C0 (3).
8. Rosette impression at the base of a pot, C0 (5).
9. Sun flower at the base of a cup, C0 (4).
10. Sun flower at the inner base of a pot having round base and spiral incised lines at the outside, E1 (4A).
11. Sun flower at the inner base with an extra zigzag line, E1 (4).
12. Sun flower at the base of a fine pot D4 (3).
13. A spoked wheel with an extra concentric circle, B3 (3).
14. A beautifully designed rosette at the base of a pot, A10' (4).
15. Wheat plant at the base of a pot, A0 (4).
16. Wheat plant at the base of a bowl, C0 (3).
17. Wheat plant at the base of a bowl, A0 (4).

Fig. 57.

1. Sun flower at the base of a pot, A0 (4).
2. Concentric circle with four other circles around, C1 (3).

3. An elaborate design of a five petal flower, each petal alternating with trident leaf, D0 (2).
4. A cup having raised bands with buttons externally, A2 (4).
5. Lotus at the base of a pot, F1 (3).
6. Lotus with angular pattern within circle having extra leaves around, D0 (2).
7. A base having four leaves at the four quarters of the circle, B1 (3).
8. Sherd decorated with a plant motif and zigzag line, probably snake, B2 (1).
9. A cup decorated in three horizontal rows, zigzag line below, straight line with buttons in the middle and vertical lines with button on the top, A0 (3).
10. Leaves on a sherd, B3 (2).
11. A circular design below grooved lines, F0 (3).
12. A seal impression on a sherd, F1 (2).
13. Sun flower at the base of a pot, A1 (2).
14. Wheat plant at the base of a pot, D1 (3).
15. Raised buttons and a vertical line on a sherd of a cup, B1 (2).
16. Sherd with two rows of decoration, lower one leaves and upper one ovals, C0 (2).
17. Sherd with concentric design, A 3(1).

Type 14. *Painted Sherds.*

Fig. 43.

5. Black painting on a red sherd consisting of two horizontal lines and a row of triangles below. The triangles have a crown on the top and zigzag parallel lines inside and between the triangles are dots in circle, A6' (5).
6. Painting at the neck of water jar, buff wash between black lines, A11' (2).
7. A sherd painted black — a hatched triangle below the horizontal line, A2 (5).
8. A sherd with black painted horizontal lines, the upper having a loop and the lower some indistinct form, E0 (5).
9. A cup with black painted lines outside, D0 (5).

10. A rim with hatched triangle having curved hooks at either end, C0 (2).
11. Black painted lines on a sherd, B0 (3).

POST SCRIPT

BY PROFESSOR AHMAD HASAN DANI

In the above report on pottery we have published fragments impressed with lotus at the base. But as no complete section was available in our excavation, it was not possible to reconstruct the whole pot. Fortunately later we received four bowls in complete shape from Shaikhhan Dheri low level digging by the local villagers. They probably belong to the Greek period. Two of them are

FINE RED WARE.

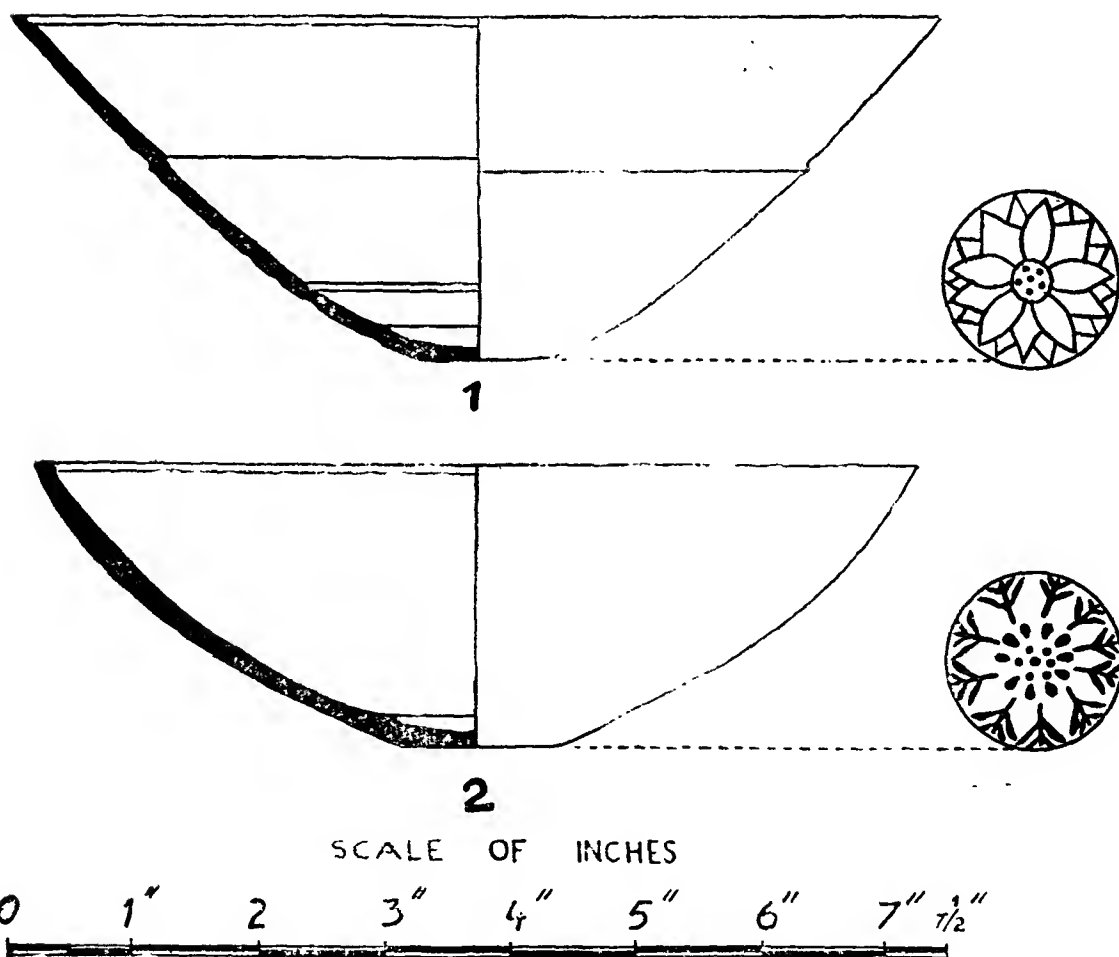
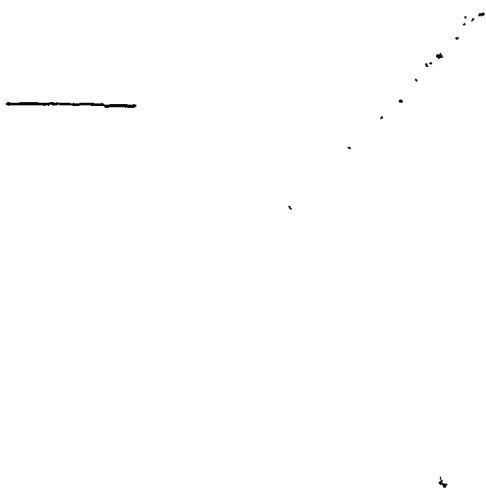


Fig. 58

published here (Fig. 58). All of them are extra fine red ware with red wash. They are wheel-turned.

No. 1: This is Wheeler's 'tulip bowl' (See *Wheeler* P. 40) with the same kick about the middle of the side. Internally there are two more grooves lower down — One encircling the lotus and the other higher up. The base is slightly flattish and shows the marks of string cut. It seems that the base having the lotus impression was made separately and then luted later. Similarly the upper part above the kick was produced separately.

No. 2: This is a variety of Wheeler's 'lotus bowl' but the pot does not make exact semi-circle. It falls short of the semi-circle. The base is again slightly flattish and the impression is not lotus. The design consists of concentric circle of dots in the middle circumscribed by plants. The ware is the same.



PERSONALITIES IN ARCHAEOLOGY

DR. MUHAMMAD ABDULLAH CHAGHATAI

by

PROFESSOR AHMAD HASAN DANI

Archaeology in the subcontinent of Pakistan and India was initiated by non-professionals who were otherwise busy in their official or other duties. It is on their efforts that the British Government was persuaded in the last century to set up Archaeological Survey in India with Major General Alexander Cunningham as the first Director. Since then the Government Department has contributed a lot to the discovery and preservation of the archaeological heritage in the country. Outside the Government service there emerged a group of scholars who continued to take keen interest in the archaeological studies. Men like Sir R. G. Bhandarkar, Bhaudaji and Pandit Bhagvanlal Indraji stand out prominently in the field, who have made solid contribution to the advance of archaeological research. From among the Muslims Dr. Muhammad Abdullah Chaghatai ranks with these devoted men of calibre. Without due recompense or recognition Dr. Chaghatai has pursued a solitary career of devoted study throughout his life to the understanding and interpretation of Islamic art and archaeology. It is, therefore, fitting that when he is among us, we give his biography a due place in the pages of this journal.

Dr. Muhammad Abdullah Chaghatai (See pl. II, No. 2) was born on 23rd November, 1896 at Lahore. He comes from a well-known family of artists and architects, among whom his brother Abdul Rahman Chaghatai is the famous painter of Pakistan. He acquired the family tradition from his own father Mistri Karim Bakhsh, and keeping in line with this family profession, he was sent to the Government Technical School, Lahore, for his early education. Later he joined the Mayo School of Arts at Lahore and finally he qualified from the Thomson Engineering College, Roorkee. Throughout this period of technical education Dr. Chaghatai had kept himself in touch with the traditional knowledge and old lore that had come down in the family. The technical education qualified him for a profession but the family training inspired in him a love for Islamic history, culture and fine arts. Ultimately the family environment superseded his technical equipment, and over and above his professional career he became persuaded to choose a life of scholarly devotion to the cause of research. It is this persuading influence of the old Islamic background that is manifest in the works of Dr. Chaghatai, who has passed on to our generation not only a new understanding of the Islamic art and archaeology from the standpoint of European angle but also from the viewpoint of the traditional artists and architects. In his

contributions he has thus passed on to our generation the accumulated knowledge of our ancestors about Muslim arts and crafts, history and culture, literature and old learning.

In order to achieve this aim of the dissemination of knowledge Dr. Chaghatai opted for the profession of teaching. All along he has remained a teacher. He started his career by organizing in 1914 the Technical School of the Anjuman-i-Himayat-i-Islam Orphanage at Lahore. Later he served from 1915 to 1924 as a Headmaster of the D. B. Technical School, Ludhiana. From 1925 to 1933 he served as a lecturer at the Islamia College, J. A. V. Department, Lahore. During his early career Dr. Chaghatai has been mainly interested in teaching. But there was something which remained latent within him. This was an urge for research and original contribution to our knowledge. But this contribution must be in the new terminology evolved by the West. Before he considered himself competent to do this, he desired to have a first hand impression of the Western countries and understand their techniques by visiting their universities and their monuments. These frequent visits to the monuments, universities, libraries and museums as well as attending conferences have become a part of the habit of Dr. Chaghatai. At great personal cost he has gone on travels in search of knowledge.

For the first time in 1932 Dr. Chaghatai went to Europe and within a period of nine months he visited England, France, Germany, Vienna and Italy. In all these countries he met with the professors, examined works of arts in the museums and consulted libraries on Islamic History and Culture. It was natural for Dr. Chaghatai that he should first get interest in the art and architecture of Central Asia wherefrom his own ancestors, the Chaghatai Turks, had migrated. As early as 1934 we find him writing on "What India owes to Central Asia in Islamic Architecture". This article was a good beginning in the study of the Muslim architecture of this subcontinent because so far in the published works no one had approached the subject from that angle. Hereafter the Central Asian features came to be recognized more and more in the local architecture. At this early time Dr. Chaghatai was also interested in Muslim painting and the influences that it left behind on the later developments. In the same year we find him writing on "A few Hindu miniature painters of the 18th and 19th centuries."

In 1936 Dr. Chaghatai joined the University of Paris at Sarbonne for the doctorate in History of Art (Mediaeval) Department. In addition he undertook the courses of architecture at the Ecole Nationale Superieure des Beaux Arts and History of Art in general at the Louvre Museum, Paris. In 1938 the University of Paris approved his thesis on the History and Architecture of the Taj Mahal at Agra and he was awarded the degree of Doctorate d' universite des Lettres (D. Litt. with Honours). This is one of the two theses written on Taj Mahal by the Muslims, the other being produced by Dr. K.A.A. Ansari in Germany under the guidance of Professor Strzygowski. Dr. Ansari later became the Archaeological Engineer to the Government of India and was mainly responsible for the actual repairs to the Taj Mahal during the Second World War. Dr. Ansari's thesis dealt more with the engineering side of the Taj while Dr. Chaghatai dealt exhaustively from the point of view of the

development of design and art. His thesis was published in 1938 from Belgium under the title of *Le Tadj Mahal d' Agra*. Later an Urdu version of this book was published from Lahore. This study of the Taj aroused a good deal of controversy and Dr. Chaghatai followed with a series of articles as listed in the Bibliography (below). Dr. Chaghatai firmly holds that the designer of the Taj was the emperor Shah Jahan himself. While in Paris Dr. Chaghatai represented the University of Paris at the 4th International Reunion of Architects in 1937 and read a paper on the Indo-Muslim Architecture.

Second stage in the career of Dr. Chaghatai started after his return from Paris. He moved down to the Deccan and joined as a Reader for research on Mediaeval India at the Deccan College and Post-graduate Research Institute, Poona, and also worked as a Post-graduate teacher for the Bombay University in Poona. During his stay in Poona Dr. Chaghatai was intimately associated with the Bhandarkar Oriental Research Institute and delivered lectures at the Osmania University, Hyderabad, Gujrat Research Society, Bombay, Forbes Gujarat Sabha, Bombay, Field Club, Bombay, and Government Mohammadan College, Madras. Till August, 1947 Dr. Chaghatai remained in Poona. All these years he devoted himself to the study of Muslim epigraphy and contributed papers on the Muslim inscriptions. He made a special study of the monuments and inscriptions of Ahmedabad and also undertook a town-wise study of the history and antiquities of Ahmedabad, Lahore, Poona, Sholapur, Bhera, Nagaur, Didwana, Jalaur, Somnath, Sodhra, and Khatu. His articles are published in the proceedings of the Indian History Congress and All India Oriental Conference, whose sessions he regularly attended. He is also a member of the Indian Historical Records Commission and since 1940 he has been contributing to its proceedings. All along he has been a great enthusiast for Muslim art and antiquities, and on many an occasion of these conferences he was instrumental in holding their exhibitions. In this period Dr. Chaghatai made a deep study of the history, art and architecture of the Muslims and tried to make his own contribution in the different fields.

The third stage in the career of Dr. Chaghatai began after 1947 when he left Poona and moved to his native city of Lahore but to his misfortune he has remained neglected by his countrymen. But this neglect has not unnerved Dr. Chaghatai. In this period he has been most prolific in study, travels and researches. In the beginning when he had no job, he developed the Nauras Kutab Khana at Lahore as a means of his livelihood. Subsequently he was able to get a part-time job of a lecturer in the Fine Arts and Islamic studies and History Departments, University of the Panjab. In December 1962 he joined the West Pakistan University of Engineering and Technology, Lahore, as a Reader in Architecture. But it is the Kutab Khana which is of utmost importance to us as it served as a means of publishing the researches conducted by Dr. Chaghatai. Most of the books produced by him after 1947 were published by this Nauras Agency. The publications include books on painting, architecture, minor arts like wood-work, jewellery etc, Muslim calligraphy and above all many unpublished Persian manuscripts. It is at this time that he made a complete survey of the history and antiquities of Lahore through the ages and further worked on "One Hundred Years of Painting in the Panjab" (1845-1947). Along with these studies and publications Dr. Chaghatai availed of every

opportunity to go abroad and see the museum collections and visit the Muslim monuments in order to get first-hand impression. In 1957 he went to U.S.A. for the first time and made a detailed study of the collections of Islamic arts and crafts in the American Museums and Galleries. In addition he gave a number of lectures and further tried to understand modern trends in architecture with Mr. Walter A. Taylor, President of the American Institute of Architects. He also made two visits to all the Near and Middle East countries including the Holy Places which gave him opportunity of study on the spot. In 1959 he represented Pakistan on the invitation of the Ankara University at the 1st International Congress of Turkish Arts. There he contributed two papers dealing with "Turkish Architectural Ornamentation in Indo-Muslim architecture" and "Turkish contribution to the History of Islamic Calligraphy". In the second session of the Congress held at Venice in 1963 he contributed a paper on "Seljuq art influence on Pakistan monuments". While making a reference to these conferences, the idea is not to catalogue all of them attended by Dr. Chaghatai, but only to show the great interest that he has been taking in them and his fervent desire to trace the Muslim heritage on art and archaeology. Let it also be recorded that Dr. Chaghatai was for a time appointed by the Government of Pakistan as a consulting adviser on the aesthetic side of the Mausoleum of the Qaid-i-Azam now under construction in Karachi.

Among the contributions made by Dr. Chaghatai during this period special mention must be made of his writings on the life and works of many Muslim painters, calligraphers, artists and craftsmen. He has tried to collect the biographical accounts from several Persian texts and examined the merits of their works on the evidence of the extant examples. His attempt has been not only to throw light on the life of the old workers but also on the techniques followed by them and the many styles and designs invented by them and left to us as our traditional heritage. It is to the rediscovery of this forgotten tradition that Dr. Chaghatai has devoted his whole life in the hope that men of our generation may see something good in our own past. As his brother painter Abdul Rahman Chaghatai has been painting in the traditional style, Dr. Abdullah Chaghatai has brought to light other fields of arts and crafts in order to keep us in line with the traditional path of our ancestors. Quite obviously he has to walk on untrodden grounds and probe into problems rarely touched by other writers, e.g. his book on the *Painting during the Sultanat Period* is the first on the subject, in which he has tried to establish the unity in Islamic spirit as seen in the early Muslim Painting. But while he stresses on the Islamic tradition, he is not blind to other trends. His book on the *Fan-e-Ta'mir* is a lucid account of the architectural developments in the world.

In this period Dr. Chaghatai further sought to enlighten the general public of this great Muslim heritage by contributing a series of articles in the Friday Supplement of Pakistan Times, Lahore. The subject is invariably illustrated with photographs and sometimes also with diagrams, and it covers a very wide range. These essays have aroused a great interest in the common man who in the world of conflicting ideas to-day is still groping to find out his own personality. Dr. Chaghatai has been dinning into his ears the great historical heritage and placing before his eyes the image of the historic personality. Are

we going to keep ourselves wedded to our tradition and base our future on the foundations of old or are we going to forget the old and build a completely new structure? It is here that Dr. Chaghatai has played a definitive role by his contributions. He has devoted untiringly to the search of our lost traditional arts and crafts in order to make us aware of them. And whether we recognize it or not, our generation owes a great debt to Dr. Chaghatai for searching these lost threads of our tradition and passing on to us to use them and build our own future.

We wish Dr. Chaghatai a long and healthy life to carry on the work.

BIBLIOGRAPHY OF HIS WRITINGS

Prepared by Sahibzada Hasan Shah

Architecture

BOOKS

1. 1. *Le Tadj Mahal d' Agra* (Inde). Histoire et Description, comprenant en Appendice le texte d' un MS. persian sur le Tadj provenant de la Bibliotheque Nationale a paris, These pour le doctorat d' universite presentee a la Faculte des Lettres de l' universite de Paris, 8vo, 2 vols; pp. 194, with 72 illus. on 32 plates and 2 figs. text of Persian MS., pp. 60. Editions de la Connaissance, Bruxelles, 1938.
2. *Taj Mahal Agra* — Urdu, 184 pp. with illustrations. Kitab Khan-i-Nauras, Lahore, 1963.
3. *Fan-i-Taamir* — Urdu (Architecture). West Pakistan Pub: Co., Ltd., Urdu Bazar Lahore-2. Published with UNESCO assistance, 1963 pp. 95 with illus.

Articles

1. 'What India owes to Central Asia in Islamic Architecture'. *Islamic Culture*. VIII, 1934, pp. 55-56.
2. 'What India owes to Central Asia in Islamic Architecture'. *Proceedings of the Seventh All-India Oriental Conference, Baroda, 1935*, pp. 915-17. Oriental Institute, Baroda, 1935.
3. 'Ustad Isa the so-called architect of the Taj'. *Indian History Congress, Allahabad, Second Session, 1938, Proceedings*, pp. 366-7. Dikshit Press, Allahabad, n.d.
4. 'The Taj Mahal of Agra'. *Islamic Culture*. XIII, 1939, pp. 378-9. Synopsis of a lecture at the Panjab University.
5. 'Austin de Bordeaux and the Taj Mahal', Agra. *Proceedings of the Ninth All-India Oriental Conference, Trivandrum, Dec., 20th-22nd, 1937*, pp. 833-8. Government Press, Trivandrum, 1940.

6. 'Is there European element in the construction of the Taj Mahal, Agra?' *Islamic Culture*, XIV, 1940 pp. 196-206.
7. 'Nagaur — a forgotten Kingdom'. *Bull. of the Deccan College Research Institute*, II 1940, pp. 166-83, with 6 illus. on 3 plates.
8. 'Pietra-Dura Decoration of the Taj' *Islamic Culture*, XV, 1941, pp. 465-72, with 3 plates.
9. 'The place of the Taj in world architecture'. *Annals of the Bhandarkar Oriental Research Inst.*, XXIII, 1942 pp. 71-6.
10. 'A Family of great Mughal Architects'. *Islamic Culture*, XI, 1938, pp. 200-209.
11. 'Indo-Muslim Architecture'. *Annals of the Bhandarkar Oriental Research Inst.*, XXII, pp. 85-93.
12. 'Indian Links with Central Asia in Architecture'. *Indian Art and Letters*, XI, pp. 85-94, with 12 illus. on 8 plates and 3 figs. With Appendix "The Mosques of Samarkand". *Gour-i-Amir*, pp. 95-101.
13. 'Pre-Mughal Architecture of Lahore (Ghaznavide Period)'. *Proceedings of the Pakistan History Conference* (Second Session), held at Lahore, 1952, pp. 230-34. Karachi, 1953.
14. 'Art and Architecture in Lahore during Akbar's reign', *Times of Karachi* October, 1953 (Annual No.).
15. 'The Ghaznavide Period in West Pakistan: Architectural Remains'. *Pakistan Review*, I, No. 5, pp. 32-3 and 45.
16. 'Pre-Muthal Art and Architecture of Lahore (during the Ghori Period)'. *Proceedings of the Pakistan History Conference* (Third Session), held at Dacca, 1953, pp. 202-8. Karachi, 1955.
17. 'The architecture of the Taj Mahal of Agra and its place in world Architecture'. Large 8vo. pp. 16, with 4 plates (1 coloured) and 1 fig. *Kitab Khana-i-Nauras*, Lahore, 1955. "Re-printed from *Iqbal*, IV, No. 1".
18. 'Sultan Hasan's Mosque'. A Cairo masterpiece. plates 5 *Pakistan Times*. 12th October, 1962.
19. 'Pre-Islamic and Islamic architecture in Kashmir'. plate 1. *Pakistan Times*, 26th October, 1962.
20. 'A short history of Lahore Fort'. Plates 2. *Pakistan Times*, 27th October, 1962.
21. 'Hazrat Ehsan's Tomb. Plates 2. *Pakistan Times*, 11th Jan. 1963.
22. 'Architectural Beauty of Multan.' Plates 3. *Pakistan Times*, 1st February, 1963.
23. 'An old mosque of Lahore'. Plates 4. *Pakistan Times*, 17th May, 1963.
24. 'Bahadur Khan's Tomb. A glorious Lahore monument'. Plates. 4. *Pakistan Times*, 24th May, 1963.

25. 'Imam Fakhruddin Razi and his mausoleum'. Plate 1. *Pakistan Times*, 3rd April, 1964.
26. 'Prophet's mosque'. Plates 3. *Pakistan Times*, 24th July, 1964.
27. 'The Idgah of Multan'. Plates. 3. *Pakistan Times*, 7th August, 1964.
28. 'Reconstruction of Wazir Khan's mosque'. Plates. 6. *Pakistan Times*, 28th August, 1964.
29. 'Architecture of the Muslims' (Pakistan-India Sub-Continent). Plate. 1. *Pakistan Times*, 8th January, 1965.
30. 'Muslim Architecture II'. Plate 1. *Pakistan Times*, 15th Jan. 1965.
31. 'Armenian Church in Isfahan'. Plates. 3. *Pakistan Times*, 12th March, 1965.
32. 'Coptic Church in Egypt'. Plates 4. *Pakistan Times*, 19th March, 1965.
33. 'Shaikh Husain Dehdah', 3 plates. *Pakistan Times*, 26th March, 1965.
34. 'Muslim Architecture, further elucidations to A.U. Pope's address', delivered to the India Society, London. *Civil and Military Gazette*, Lahore, 7th February, 1933.
35. 'What we owe to Iran in Indo-Muslim Architecture' — a tribute to Agha Ali Asghar Hikmat. *Pakistan Times*, 20th December, 1953.
36. 'The Oldest extant Muslim architectural relic at Lahore'. 7 plates *Journal of the Pakistan Historical Society*, Vol. XII, 1964.
37. 'The Description of Taj Mahal based on contemporary sources'. *Iqbal Quarterly*, Lahore, 1957.
38. 'Shahdara Mosque — an ancient monument of Lahore in the Akbari Sarai'. *Pakistan Times*, 17th March 1965.
39. 'Old Monuments of Lahore on the Multan Road'. *Civil and Military Gazette*, Lahore, 26th October, 1958.
40. 'Masjid-i-Nabavi, Madina'. *Imroz*, Lahore, 23rd March, 1958.
41. 'The Origin of Jharoka in Mughal Architecture', *Civil and Military Gazette*, Lahore 27th September, 1959.
42. 'Mulla Saifullah's Mosque — the gem of Isfahan', *Pakistan Times*, 20th July, 1962.
43. 'Prof. K.A.C. Creswell — a great authority on Islamic architecture', *Pakistan Times*, 3rd August, 1962.
44. 'Creswell's interest in Muslim Art', *Pakistan Times*, 10th August, 1962.
45. Creswell's work: Bibliography of Muslim Art', *Pakistan Times*, 24th August, 1962.
46. 'A short history of Lahore fort', *Pakistan Times*, 27th October, 1962. (Copy to be sent)
47. 'The Mosque of Amr bin al-Ass at Fustat', *Imroz*, Lahore, 14th April, 1960
48. 'Minar-i-Jam', *Pakistan Times*, 22nd Feb. 1963.

49. 'An old Mosque of Lahore — the so-called mosque of Dai Angah', *Pakistan Times*, 17th April, 1963.
50. 'Idgah of Multan', *Pakistan Times*, 7th August, 1964. (فصل اول)
51. 'Restoration of Wazir Khan's Mosque at Lahore', *Pakistan Times*, 28th August, 1964. (فصل اول)
52. 'The City of Kabul', *Pakistan Times*, 30th October, 1964.
53. 'Zeb-un-Nisa and her tomb', *Pakistan Times*, 2nd Nov. 1953.
54. 'Jahanara built Chauburji Gardens', *Pakistan Times*, 30th Nov. 1953.
55. 'The largest dome with a whispering gallery', *Pakistan Times*, 24th July, 1953.
56. 'Lahore's six hundred years old Idgah', *Pakistan Times*, 29th August, 1955.
57. 'Lahore's first Mughal Garden', *Pakistan Times*, 4th Jan. 1955.
58. 'Anarkali Myth', *Pakistan Times*, 8th Jan. 1955.
59. 'The mosque of Mariam Zamani', *Pakistan Times*, 30th Dec. 1956.
60. 'The mosque of Muhammad Salih Kamboh and his tomb', *Pakistan Times*, 2nd Dec. 1956.
61. 'Ali Mardan Khan, the Engineer-in-chief of Shah Jahan', in *Maarif*, Azamgarh, 1939.

Painting

BOOKS

1. "Jehangir ka Zauq-i-Musawari" (Urdu). pp. 30. *Iqbal Quarterly*. Vol. 9. off-print: published separately by Kitab Khana-i-Nauras, Lahore, 1961.
2. "Painting during the Sultanate period" (712-1575) pp. 62. Kitab Khana-i-Nauras, Lahore, 1963.
3. *Islamic Musawari*: Urdu (Islamic Painting its historical evolution) N.D. Kitab Khana-i-Nauras, Lahore.

Articles

1. 'A few Hindu miniature painters of the 18th and 19th centuries', *Islamic Culture*, 1934. ✓
2. 'Le Peinture moderne de Lahore'. *Supp. monograph submitted to the University of Paris*, 1938.
3. 'Illustrated edition of the Razmnama' *Bulletin of the Deccan College Research Institute* Vol. V. Poona.
4. 'A century of painting in the Punjab 1844-1947'. *Iqbal Quarterly*, Lahore Vol. IX.

5. 'Mughal Miniature as a mirror of contemporary life', *Morning News*, August, 1962.
6. 'Emperor Jehangir's interview with Gosain Jadrup with contemporary portraits'. *Islamic Culture*, Hyderabad Deccan, 1962.
7. 'Kamal-ud-din Bihzad Musawwir' — *Urdu*. Karwan (Annual), 1932.
8. 'Khawaja Abd-al-Samad Shirin Qalam. *Journal of the Pakistan Historical Society Karachi* Vol. XI Pt. II. April 1963 pp. 155-181 with five halftone specimens of paintings.
9. 'Miniature Painting'. Muslim contribution. Plate 3. *Pakistan Times*, 9th October, 1964.
10. 'Tuti Nama'. (Tales of a parrot) Plate. 5. *Pakistan Times*, 20th Nov. 1964.
11. 'Mir Sayyid Ali Tabrizi', *Pakistan Quarterly*, Karachi, Vol. IV.
12. 'Aqa Riza, Riza Abbasi, Ali Riza', *Islamic Culture*, 1938.

EPIGRAPHY AND CALLIGRAPHY

Articles

1. 'The earliest Muslim inscription in India from Ahmadabad'. *Proceedings of the Indian History Congress. Third Session, Calcutta*. 1939. pp. 647-8, with plate. 1.
2. 'An incomplete inscription from Ahmadabad'. *Journal of the Gujrat Research Society*, III, pp. 171-3, with 1 illus. Bombay, 1941. Persian inscription from a mosque built by Sayyid 'Alam Abu Bakr Husayni' in 815 H. (1412/13).
3. 'Muslim Monuments of Ahmadabad through their inscriptions'. *Bulletin of the Deccan College Research Institute*, III (1941-42), pp. 77-180, with 18 plates of inscriptions and 8 pp. of Index. 1942.
4. 'Malik Hajji's Garden House Inscription' (at Ahmadabad). *Bulletin of the Deccan College Research Institute*, IV, pp. 358-62. 1943. Inscription dated 2 Rajab 864 (23rd April, 1960), now in a recently built mosque.
5. 'Muslim Inscriptions from Khatu' (Marwar). *Proceedings of the Indian History Congress*, Ninth Session, Annamalainagar, 1945, pp. 286-8. Allahabad, (1947). Inscription recording repair of Great Mosque in 968 H. (1560-61).
6. 'Some Inscriptions from Jodhpur State, Rajputana'. *Epigraphia Indo-Moslemica*, 1949-50, pp. 18-53 and plates IX-XXII. 1954.

Mosque at Ladnun, 27 Dhu'l-Qada 772 (12th June, 1371), and at Didwana, 10 Muharram 779 (19th May, 1377); Shaykun Mosque 779 H. (1377-78); another mosque, 786 H. (1384); Gateway and city wall; Rabi' II, 840 (October, 1336) repaired 889 H. (1484-5); Jami' Masjid repaired Shawal 896 (Aug. 1491) Mosque for corporation of weavers, 14 Sha'ban 961 (15th July, 1554).

7. 'Calligraphy in Turkey'. Plates. 3. *Pakistan Times*, 14th Sept; 1962.
8. 'Nasta'liq Style'. Some inscriptions. plates 4. *Pakistan Times*, 3rd May, 1963.
9. 'An inscription of Mahmud of Ghazni's grave at Ghazna'. *Oriental College Magazine*, Lahore, 1934.
10. 'Akbar's inscription from a Deoband mosque', *Maarif*, Azamgarh, 1928.
11. 'Sholapur's Muslim inscriptions'. *Proceedings of the Deccan History Congress*, Hyderabad, 1945.
12. 'Nagaur — a forgotten kingdom' — *Bulletin of the Deccan College Research Institute*, Poona, Vol. II.
13. 'Famous Calligraphists — experts of Nasta'liq', *Pakistan Times*, 27th March, 1953.

MINOR ARTS

BOOKS

1. 'Fanun-i-Latifa ba'ahd-i-Aurangzeb' "Fine Arts during the reign of Aurangzeb" Urdu, pp. 120. Kitab Khana-i-Nauras, Kabir Street, Lahore, 1957.
2. *Islamic Kuzagari*: Urdu (Islamic Pottery: a history) N.D. Kitab Khana-i-Nauras, Lahore.

Articles

3. 'Collection of Muslim Fine Arts in U.S.A.' (English), Franklin Publishing House, New York, 1957.
4. *Islamic Tiles*. A visit to Oxford Museum, *Pakistan Times*, 6th July, 1962.
5. 'Wood Work'. Contribution by Muslims. *Pakistan Times*, 5th October, 1962.
6. 'Ancient Arab Pottery'. Plates. 2. *Pakistan Times*, 2nd Nov. 1962.
7. 'Some facts about Iranian Pottery'. *Pakistan Times*, 7th Dec. 1962.
8. 'A rare piece of Muslim Art'. *Pakistan Times*, 10th July, 1964.
9. 'Wooden Coffins of Imam Husain, Cairo', *Pakistan Times*, 31st May, 1963.

GENERAL

1. 'Deccan's contribution to Indian Culture'. *Islamic Culture* 1936.
2. 'Maghrabi Pakistan ki ek Tarikhi Basti — Sodhara" Urdu (Sodhara a historic town of West Pakistan) *Iqbal* October, 1964. Printed separately 1964 pp. 17. Maktaba-i-Nauras, Lahore.
3. "Lahore Sikhon ke ehad Main", Urdu (Lahore during the Sikh Rule) pp. 164. Maktaba-i-Nauras, Lahore, July 1964.

4. "Sirat-i-Balal" Urdu pp. 207, Maktaba-i-Nauras, 1962.
5. Libraries in Early Islam. Plate. 1. *Pakistan Times*. 28th September, 1962.
6. 'Muslim Translations of Hindu Classics. Kalila wa Dimna.' Plates 2. *Pakistan Times*, 16th November, 1962.
7. 'A Landmark of Ghourid grandeur'. Plates. 3. *Pakistan Times*, 22nd February, 1963.
8. 'Ghourids and Lahore'. Some historians. *Pakistan Times*, 5th April, 1963.
9. 'Sultan Muhammad II and Gentile Belling of Venice'. plates 5. *Pakistan Times*, 11th October, 1963.
10. 'Tipu's dam across the Cauvery'. plate 1. *Pakistan Times*, 19th June, 1964.
11. 'Jami'. plates 4. *Pakistan Times*. 4th December, 1964.
12. *Badshahi Masjid*, (Urdu), Lahore, 1956.
13. *Ilm Parwari aur Hunar Shanasi* (Urdu), Lahore, 1957.
14. *Alimad, Ma'mar-i-Lahore* (Urdu), Lahore, 1957.
15. *Allama Iqbal wa Sayyid Suleman Nadvi*, (Urdu) Lahore, 1956.
16. *Maghribi Art ki Mukhtasar Kahani* (Urdu), Lahore, 1958.
17. 'Poona in the Muslim Period', in *Bulletin of the Deccan College Research Institute*, Vol. II.
18. 'More about Poona in the Muslim Period', in *New Indian Antiquary*, Poona, 1943.
19. 'A unique Farman of Emperor Aurangzeb Alamgir to a Mahratta Chief' in *proceedings of the Indian Historical Records Commission*, 1941.
20. 'Sixteen Persian Documents concerning Nandurbar (Khandesh)', *Ibid*, 1942.
21. 'An old copy of an Adil Shahi Farman to Shahji Bhonsle', *Ibid*, 1943.
22. 'Adil Shahi Grants to Shaikh Muhammad Abu Turab Mudarris', *Ibid*, 1944.
23. 'Mahzar Nama concerning Babar Shah's shrine at Cambay', *Ibid*, 1945.
24. 'A Farman of Aurangzeb Alamgir to a zamindar in the province of Berar', *Ibid*, 1946.
25. 'Three Persian Documents concerning Baglana (Baglan) in Khandesh', *Ibid*, 1947.
26. Historical Documents of Aurangzeb's period in the Civil Secretariat, Lahore', in *Proceedings of the Pakistan Historical Records Commission*, 1955.

EDITED TEXTS

1. '*Halat-i-Hunarvaran*: Persian: original MS. Compiled in 951. A.H. account of muslim painters and calligraphists, edited, N.D. Kitab Khana-i-Nauras, Lahore.

2. *Rehan-i-Nastaliq*: Persian original MS. compiled in 989 A.H., on Nasta'liq style of calligraphy.
3. *Tarikh-i-Muzaffar Shahi*: Persian; by Qanai 924 A.H., relations of the Sultans of Malwa and Gujrat edited, N.D. Kitab Khana-i-Nauras, Lahore.
4. *'Waqiat-i-Alamgiri* Persian, by Aqil Khan Razi edited N.D. Kitab Khana-i-Nauras, Lahore.
5. *Tabqat-i-Nasiri*: Persian, by Minhaj-i-Siraj. Edited with an introduction and indices, 1952. pp. 230. (sections 11, 19, 20, 21 and 22 of the original only dealing with the history of India).
6. *The Tarikh-i-Saltanat-i-Bahmania* by Suhail in Urdu verse, Edited. Anjuman-i-Taraqi, Urdu, 1943, Delhi.
7. *Futuh-i-Firoz Shahi* with introduction and notes, Lahore, 1942.
8. A Persian Mathanawi — 'Ta'rif-i-Husain Nizam Shah' by poet Aftabi, relating to the battle of Talikota, in *Urdu Quarterly*, Delhi, 1943.
9. *Yaddashti-i-Taj Mahal*, Bibliotheque Nationale MS., Paris, 1938.
10. 'A Manuscript of the Mirat-i-Sikandari' in Bulletin of the Deccan College Research Institute, Poona, Vol. V.

Note: Many articles on one and the same subject appearing in different languages have been included here only once. Some appearing in the little-known magazines have been omitted. There are quite a number of books and articles in the manuscript form, which remain to be published.

REVIEWS

1. LOUIS DUPREE — *Deh Morasi Ghundai: A Chalcolithic Site in South Central Afghanistan*. Anthropological Papers of the American Museum of Natural History, New York. 1963, Vol. 50. pt. 2. pp. 57-136, plates 13-25, 30 text figures, 199 designs, 12 tables, Price dollars: 2.50.

The monograph reports on the excavation of the Deh Morasi Ghundai site about 16 to 17 miles south-west of Kandahar — an important station enroute from northern Iran to Quetta. This is one of the many sites that lie on the edge of the great desert region of south-west Afghanistan. All these sites are useful in tracing the influences coming from Iran and passing on to Baluchistan. Here we see the presence of both the influences from the buff-ware cultures of southern Iran and the red-ware cultures of northern Iran. And there is no doubt that the twin influences reached Quetta and also Zhob Valley. It is for this reason that Piggott's classification of Baluchi cultures into buff-ware zone and red-ware zone is now upset.

At Deh Morasi four main periods have been distinguished. The first period is known only by a few sherds, here roughly said to be comparable with Rana Ghundai I phase (see next review) but no flint tools have been reported here. The second phase is the most important period which has yielded ceramics comparable with Quetta on the one hand and Iran on the other. In this period we also get here the typical Zhob Culture mother-goddess (Pl. 23.O). It is difficult to accept the argument of Dupree (P. 98) when he suggests "that the Zhob figurines represent a primitive *Kali*". The goddess *Kali* is rooted in the primitive Indian cultural concept where grotesque and ferocious demand a particular kind of sacrifice while the Zhob figurine is related to the concept of the mother-goddesses of Western Asia. In this very period we find compartmented seals also rooted in the old civilizations. Another important find is the shouldered hoe (Fig. 12) which has also been found at Mundigak and Tepe Hissar. I picked up a few examples on the surface in the northern part of Peshawar region. Period III revealed three burials which could not be properly examined. The ceramic continued some features of the earlier period. Period IV yielded a mixed deposit which is dated roughly between 2000 to 1500 B.C. But two finds are very important. The rouletted ware (P. 113) fragments (Pl. 23. K and L), if they are really so, are the first of the kind reported from this area. Similarly the terracotta figurine (Pl. 23-P) is the well-known "baroque lady" of Gandhara.

Such monographs suggest the importance of the Kandahar area for intensive exploration.

A. H. Dani.

2. WALTER A. FAIRSERVIS (Jr.) — *Archaeological Surveys in the Zhob and Loralai Districts, West Pakistan*, Anthropological Papers of the American Museum of Natural History, New York, 1959, Volume 47, Pt. 2. pp. 273-448, 25 Plates, 84 text figures.

The monograph under review is the third in the series describing archaeological research in Baluchistan and Afghanistan by the American team. The survey relates to an area locked up by the Sulaiman Range on the east and the Tobakakar Range on the West and includes mainly two valleys, the Zhob valley that slopes to the north towards the Gomal river and the Loralai that slopes south-west, both being approachable from Quetta. The Zhob has also a direct access to Afghanistan via Qamruddin Karez and there are passages across the Sulaiman into Sind. The Loralai has also other routes along the river valleys to Sind. But the direct route from Afghanistan through Kandahar, Quetta, Bolan Pass to Sibi lies further south of this area. Thus Zhob-Loralai Zone is an intervening pocket between the Sind plain of the Indus and southern Afghanistan away from the direct communication line between Southern Afghanistan and Sind. However, the zone is important in so far as it connects Quetta — the gateway to Bolan Pass — with the Gomal pass which opens another passage across the Indus to Multan in the Panjab. So far the cultural complex noted in this zone has not been found north of the Gomal river¹. The zone was first surveyed by Sir Aurel Stein² who started from the north in Waziristan and came down to Quetta. Stein's work brought to light number of sites, but real chronological sequence to this complex was given by Ross³ in his stratigraphic study of the Rana Ghundai site. On the basis of these works Piggott⁴ defined the "Zhob Culture", and characterised it mainly by its pottery types and the peculiar figurine of the mother-goddess. The present study of Fairservis is to arrive at a more definitive evaluation of this culture complex and relate the different phases of its growth with those that were earlier established in Quetta region. For this purpose he started his survey from the south in Quetta and went northward. The limited time of three weeks at his disposal enabled him to revisit the sites of Stein and add a few more. Though his own work was of a general nature, he succeeded in redefining the phases at Sur Jangal, Rana Ghundai and Dabar-Kot in Loralai and at Periano Ghundai, Mughal Ghundai and Kaundani in Zhob. According to his analysis the earliest phase in Rana Ghundai is later than the earliest period at Kille Gul Muhammad, but still more important is the recognition that this Zone had contact with the Quetta group as is illustrated in some pottery types, flint implements and the so-called Zhob figurines. Evidence has also been produced to show direct contact with the Harappan Culture in Rana Ghundai III phase and also with the cultures on the west. But so far Rana Ghundai I phase remains ill defined. Not much is known about

1. My recent visit to the sites in the Gomal valley in Dera Ismail Khan district has convinced me that these sites appertain to the same cultural complex.
2. An Archaeological Tour in Waziristan and Northern Baluchistan. *Memoirs of the Archaeological Survey of India*. No. 37. (1929).
3. 'Rana Ghundai — A chalcolithic site in northern Baluchistan. *Journal of the Near Eastern Studies* (1946) Vol: 5. No. 4. pp. 291 - 315.
4. See his *Prehistoric India*, Chapter IV.

the character of the flint tools and the nature of the nomadic stage of life. It is, however, being realized that the Zhob culture was not an isolated growth. It is an adaptation of the general bronze-age cultural developments of the ancient world in the environmental background of this region, in which the route from Quetta onward to the Gomal Pass must have played an important part. So far the study of this culture has been made on the basis of the sites lying mainly on this route. The Survey of Fairervis is an overgrowth of his *Excavations at Quetta*.

A. H. Dani.

-
3. J. M. CASAL — *Fouilles de Mundigak*, 2 vols; *Memoires de la Delegation Archeologique Francaise en Afghanistan*. Tome XVII. 140 Figs. 45 plates. Paris, 1961.

Mundigak lies 55 km. to the north-west of Kandahar in a valley separated from that of the Arghandab by a chain of small hill. It was the first prehistoric site to be excavated at some length in South Central Afghanistan, thus providing an important connecting station between the prehistoric sites in Iran and Southern Pakistan. The excavated materials are of the greatest value to us as they provide a time scale for interlinking the bronze age materials from Pakistan with those of Iran found here together in the different periods. Unfortunately the radio-carbon dates published by Casal (P. 258) have little value as the inconsistencies in the dates suggest that there must have been some mixing in the samples. Notwithstanding this defect in the report it is possible to arrive at some chronological fixation on the basis of the wealth of materials produced.

The excavator himself has distinguished seven periods in the history of Mundigak with many sub-periods recognised on the basis of different building phases. According to him there was an interval between periods I and II and again between periods IV and V. But the general description of the author suggests four main phases in the development of Mundigak.

Phase I, which includes his period I, is a nomadic stage in early levels but shows some structures in the later levels and painted pottery tradition which the author compares with Susa I and Uruk. The nomadic stage is, however, to be compared with Rana Ghundai I and Deh Morsai Ghundai I. The structural remains, which begin in sub-period four of his Period I, continue in Period II, with of course a "break" or probably invasion of a new people who used coarse pottery.

Phase II represents the village culture of Mundigak which should include the different building phases of the structural remains in the author's period I (sub-period 4 to 5), II and III. The intervening Period II, which shows retardation in the cultural growth and a complete break in the other site at Deh Morasi Ghundai (see review above), appears to be a local affair. But the main development in this phase is seen in the author's period III. Here the

comparable materials may be seen in the Quetta, Nal and Zhob cultures of Baluchistan. In all these phases similar village cultures developed. It is also possible to trace some distant connection with the village cultures of Sind, as can be gathered from some painted designs and microliths. *Pipal* leaf design appearing on a pedestalled cup (Fig. 59 No. 116) in period III becomes more common (see Fig. 64) in the next phase. This leaf is typical of the Indus Civilization. This period must be considered co-eval with the early phase of Rana Ghundai III but the latter site could not grow beyond the stage of village culture most probably because of its environmental condition. The same is true with Deh Morasi Ghundai, in which case its period II should equate with Mundigak III.

However, Mundigak Phase III, which includes Casal's periods IV and V, represents an urban development where the author has been able to identify rampart wall, palace remains and temple ruins. Period V is distinguished from period IV in so far as the earlier buildings no longer remained in use but instead a massive monument was observed. There is also a deterioration in the art of ceramic painting. This urban development in Mundigak is partly co-eval with Rana Ghundai III, as the author himself believes. Among other parallel materials the most important is the "Zhob mother-goddess" found here — a fact which now proves a wider circulation of this figurine type. Similarly it has been recognized by Piggott that the Harappan contact was established in Rana Ghundai III phase. Thus here we see Rana Ghundai III connecting two urban developments — one in the Indus Zone and the other in the Arghandab valley of South Central Afghanistan. The two developments were not the same but each must be explained in its particular environment.

The last phase in Mundigak, which includes Casal's periods VI and VII, was again an age of cultural retardation in which the massive constructions came to an end. Old ceramic types survived for some time only to be replaced by unpainted coarse ware. This decay of the old ceramic painting art is also seen in Rana Ghundai IV which should be co-eval with this last phase of Mundigak. Fairervis in his report (see review above) sees some connection between this period of Rana Ghundai IV and Jhukar phase in Sind. This last phase of decay need not be due to an invasion. It must be connected with the drying up of those resources on which the urban development at Mundigak was founded. Unfortunately there is no clear picture of these conditions of living in the report. Mundigak ruins stand alone to tell the story but the story has to be understood in the wider back-ground of contemporary life in the area, for which we have still to work more and more there.

A. H. Dani.

4. B. de CARDI — *Excavations and Reconnaissance in Kalat, West Pakistan: The pre-historic Sequence in the Surab Region*, published in *Pakistan Archaeology*, by the Department of Archaeology, Ministry of Education, Government of Pakistan, Karachi, Number 2, - 1965, pp. 86-182. Figs. 23; plates 9. Journal priced Rs. 15.00/25 Shillings.

Baluchistan has drawn the attention of the archaeologists for a long time as a transition zone between the Indus Civilisation of the main valley and the ancient cultures that grew up in the Iranian plateau. Several sites have been located along the old caravan routes and the river valleys but all present a picture of the poverty-stricken communities seeking life in the dry zone of Baluchistan more by trade than in the subsistence of the local products. Recent studies of Fairervis and de Cardi have focussed light on these little communities pursuing their hard life in isolated pockets of small valleys with occasional germination of new cultures on the arrival of new caravans, loaded with goods and technical knowledge of higher culture. Such studies are highly rewarding in those places where the caravans from different directions meet. The Surab Region, studied in this report, is one such area which was selected after careful consideration of all these problems. The region on the one hand opens through Mula pass into the main valley of the Indus and on the other three routes diverge — one northward to Quetta, the second southward along the Mashkai river and the third westward along Rakshan river and lower down along the Kech river. With such a central location it was not difficult to catch here the influences from different quarters. But the excavation was rather short and only one part of the report is published here, with a promise that the whole exploration report will follow in the next issue of the journal.

The report deals with the excavations of only two sites: Anjira and Siah-Damb, Surab. At Anjira the excavation revealed four main periods, to which period V was added by the surface collection of materials and those found "in superficial layers". At Siah two main periods were distinguished, the second subdivided into three phases. Again period III was added by the "Surface sherds". At Siah period II was most important. On the basis of pottery it was equated with period III of Anjira. Period I of Siah was again poorly represented but on the sparse material recovered it was equated with Anjira II. Thus the sequence is as follows:

<i>Anjira</i>		<i>Siah</i>
Period I	?
Period II	Period I
Period III	Period II with 3 phases
Period IV	Period III
Period V	?

In order to re-assess the whole material we can broadly group them under three categories:

- (A) The age of Stone, when metal tools were not known. This includes Anjira periods I and II, the first period of settlement yielded no

structures but only pottery, chert flakes and animal bones; and the second period revealed boulder walls as footings for mud-brick super-structures with almost the same material contents plus additional types of pottery, particularly "cream-surfaced hand-made and basket-marked wares, ranging from a quarter to a half of the total number of sherds found". (P. 101).

- (B) The age of Metal, when "chert implements had disappeared completely, and their absence, combined with the discovery of a whetstone may signify the introduction of metal during this period" (P. 102). This includes Anjira periods III and IV, the third period marked by walls of "roughly squared stone" and the fourth period by "fine squared masonry walls". This last was "a period of rebuilding and great expansion", when pottery types clearly show contacts established with Amri in the main valley of the Indus and with Nal and other sites in the South.
- (C) It includes "an ill-defined Period V" of Anjira, which is supposed, on the basis of surface pottery, to include "a small settlement of Rana Ghundai III C or allied folk". This was obviously an age of decay and desolation, probably a disruption of the main sources of life.

The chert implements of Anjira have been described and discussed by the late Col. D.H. Gordon (PP. 122-26). He has placed them in the wider context of the neighbouring areas. A doubtful terminology of "neolithic assemblage" has been applied to them, while Dr. Fairservis in his report on *Excavations in the Quetta Valley*¹ has gone outright to speak of "neolithic period". The term has to be understood in a limited sense as applicable to the environment of Baluchistan. The chronology of the period has been discussed by de Cardi in the background of Sialk and Hissar (PP. 111-15). The first period of the so-called "nomadic settlement" is equated with Kile Gul Mohammad II, but in general can be understood in the background of the earliest settlements in Deh Morasi Ghundai, Rana Ghundai and Mundigak (see earlier reviews). Quite naturally, in this stage A, de Cardi found pottery types showing links with the north. At Kot Diji (see next review) some chert flakes and "micro-blades" were found in the earliest level along with the well-known ribbon-flakes of the Indus Civilization. How far can we now understand them in the background of the materials from Baluchistan? However, a definite link with Amri and Kot Diji is seen in period III (P. 113).

On the whole the report is very constructive and advances our knowledge of the people of Baluchistan at this little-known period of history.

A. H. Dani.

1. This report could not be reviewed in this journal because I could not procure a copy.

5. Dr. F. A. KHAN — *Excavations at Kot Diji*, published in *Pakistan Archaeology*, by the Department of Archaeology, Ministry of Education, Government of Pakistan, Karachi, Number 2-1965, PP. 11-85, Figs. 1-26 and Plates I-XXXIV. Journal priced Rs. 15.00/25 Shillings.

The long awaited report on the *Excavations at Kot Diji* has at last been published. For this achievement Dr. F.A. Khan must be congratulated. But even greater credit goes to him for actual excavation of the site and a clear recognition of a cultural pattern at Kot Diji that is chronologically as well as materially accepted to be a "fore-runner" of the great Indus Civilization. Before him the late-lamented Mr. N.G. Majumdar had discovered the pre-Harappan Amri site but his untimely death did not allow him to go beyond the exploration stage. It was left for Mon. J. M. Casal to carry out the detailed excavation at the site (See below for review). Kot Diji, therefore, offered the first important pre-Harappan materials in the main Valley of the Indus. The discovery and the excavation of the site would continue to show the great interest that the Government of Pakistan has been taking in the furtherance of our knowledge about the Bronze Age Cultures in the Indus region.

The report, however, leaves much to be desired. A superficial examination, no doubt, enables us to understand the two clear-cut cultural patterns at Kot Diji — the mature Harappa phase as represented in the upper levels (Layers 1 to 3 in the citadel area and layer 1 in the city area) and the "Kot Diji" culture in the lower levels (layers 4-16 in the citadel area and layers 2-5 in the other area). But for a detailed study we would have liked that the draughtsman's drawings of the plan and sections to be properly utilized in the text, and both presented in a way that the report is intelligible to the readers who have had no opportunity to go to the site. It seems that the text writer never bothered to go to the drawings and he prepared his own report on the basis of his daily note-book. The only exception is the report on pottery, which obviously was written and drawn together in the office. To give a few examples:- the report has been divided into "A Citadel" and "B Outer City", but except for Fig. 5, which refers to Sq. A III/20 all other sections are described as Squares of B. It was difficult to find out the line of the section on XX from the published plan, Fig. 4. Obviously the upper section on Fig. 10, marked as Sq. B IV/5 refers to the Citadel area, as it is there that sixteen layers were found. Similarly the descriptions of the cuttings from area B, given in the text are not those of which sections are apparently published. It is not necessary to add any more. A little more caution would have made the report more readable. On the other hand if one desires to know fully the chronological interlocking of the different layers of the Kot Diji culture with the neighbouring excavations, he is not made wiser by this report. He will have to go to the account published by others, e.g. relations with Amri to Casal and with Kalat sites to Miss de Cardi. In their accounts we get a clear-cut time scale for the different periods, which we lack here.

This criticism does not in any way lower the value of either the report or the excavation. From the report we learn of the two main periods of the Harappan Culture and two or rather three of the Kot Diji Culture. The mature phase

of Harappan Culture is attested in the upper levels of the area A — Citadel, below which is the stage of invasion and burning in the opinion of the author. In the Harappan period "there is no evidence to show that the Harappans also used the fortification wall". (P. 16). However, "Spacious rooms with stone foundations, mud-brick superstructures and mud-brick paved floors have been uncovered in a considerable area" (P. 18). If we omit the stage of burning, we miss the earlier phase of the Harappan culture in the citadel area. For that the author takes us to the excavations in the City — area B. There layer (1) is a mixed material and immediately from layer (2) downwards Kot Diji objects have been met with. The total number of layers here was five but "in some of the squares in the south-eastern slope Harappan pottery continued down to layer (4)" (P. 37). According to the author the Harappan pottery of these layers is simpler and earlier in date than those found in the upper levels of the citadel area. This simpler Harappan pottery reached Kot Diji by trade earlier than the invasion. Thus the author speaks of the contemporaneity for some time of the early Harappan with the Kot Dijian. It is, however, strange that this simpler pottery of Harappa could not be found in the deep trenches in the citadel area, where we have again to go back for the main evolution of the Kot Diji Culture. Its two phases are clearly understood: (a) early, when the painted decoration consisted of a simple band at the neck and (b) late when more decorated forms in painting is seen. Probably a third stage may be distinguished when we get more elaborate decoration like the "Horned deity" (Pl. XVII, Fig. 16) on pot. This classification is clear from the detailed account of the pottery. Other finds have been sparsely described. We would have liked to know more about the terracotta bull mentioned on P. 83. Does it refer to Pl. XXVIII a? If so, it is highly expressive. The micro-blades and scrapers can be seen in the photograph (Pl. XXXIV b). One important point to note is the principle of construction — mud-brick super-structure on stone foundation, a system also known from Kalat area (see above review No. 4).

A. H. Dani.

-
6. J. M. CASAL — *Fouilles D' Amri, Publications de la Commission des Fouilles Archeologiques, Fouilles du Pakistan*, Paris, 1964, 2 Vols. Volume I text and Volume II illustrations, with an English summary.

The site of Amri was discovered by N.G. Majumdar as early as 1929, who was the first to recognise its pre-Harappan nature. For a full-scale excavation of the site we had to wait long until Mon. Casal's work, which is completed most efficiently. In his detailed report under review he has ably presented the materials in a way that we are now in a position to think in concrete terms the evolution of the Bronze Age cultures in the main Valley of the Indus and their relation on the one hand with those that grew in Baluchistan and Afghanistan and on the other with the developments in the Indian site like Lothal in Gujarat. "Amri, in the Dadu district, is a small village about one mile from the Indus, on the right bank, and some hundred miles from Mohenjodaro, farther downstream."

The problem of the origin of the Harappan civilization has long faced the archaeologists. Both at Harappa and Mohenjodaro the civilization is seen at its mature stage. There was thus the need of discovering an earlier period site. From this angle the excavation of Amri is of prime importance. The object of Mon. Casal's excavation was "to go deeper into the discovery made by Majumdar at Amri, and elucidate whether the Amri Culture had some parental relationship with the Harappan Civilization, or otherwise to clarify the degree of precedence or contemporaneity linking them".

There are two mounds at Amri, named in the report A and B. Casal concludes: "the earliest settlement had been confined to Mound A and that the occupation had only later extended to Mound B." The materials are divided into five main periods, of which the last is a later occupation of the Muslim period. Of the "prehistoric periods" (I to IV) the first is taken to be the true representative of the Amri culture, characterised by the typical thin ware pottery of the site, mud-brick walls, "chert blades" and other objects. The author notes: "in one case, there is an indication that wooden posts had been embodied in the walls". Later the author notes the occurrence of timber re-inforcing in the burnt brick masonry, discovered in the Great Granary and defence tower in 1950 excavation at Mohenjodaro. Is there any connection in this wood technique of the two cultures? The author does not commit himself. However, he divides the first period into four sub-periods and traces the evolution of the ceramic tradition. Significantly even in the earliest sub-period the decorations are much more evolved than those seen in the lowest levels at Kot Diji. At the same time "Togau C crooks" are seen here in the first and second sub-periods. This recognition of Togau ware gives a solid base to link Amri culture chronologically with those in Baluchistan, particularly in the Surab region. de Cardi says: "Togau-ware was associated almost wholly with the period III occupation at Anjira, with only a single sherd from the preceding and later periods". In other words the earliest level of Amri coincides with phase B (see above review No. 4) of Anjira. What about Kot Diji? Casal remarks: "The Kot-Dijian Culture seems accordingly to be contemporaneous with period I at least partially, and Period II of Amri. It looks as though Amri and Kot-Diji had a common background of a local culture. But Amri being much more diversified must have had closer contacts with Baluchistan in which Kot-Diji did not take part, probably for geographical reasons". This remark of Casal can hardly be accepted now when the Kot-Diji report is published (see review No. 5). The system of house construction at Kot Diji — stone footing with mud-brick super-structure — clearly recalls the similar practice of Surab region. On the other hand Kot Diji pottery has not produced any Togau ware, nor even the animal designs seen in the last sub-period at Amri. It is possible that there was a contact between Surab region and Kot Diji in Phase A of Anjira but later with the introduction of metal there the contact was lost. On the other hand the pottery decorations of late Kot Diji culture (our phase b) compare fairly well with Amri Period I. Thus according to our estimation the early phase of Kot Diji appears to be earlier than the main Amri settlements.

In the last sub-period "a few specimens of Harappan pottery appear".

But "the progressive multiplication of Harappan types" is seen in the main period II, which is regarded as an intermediate stage between the main Amri culture of period I and full-fledged Harappan culture of period III, which includes the Jhukar culture in the last sub-period. Period IV is characterised by Jhangar culture. Period III a "practically marks the disappearance of the Amrian pottery". What brought about its end? Casal is doubtful: "The upper layers (period II) are blackish and ashy, but they are mostly so near the surface that it is difficult to say whether this occurrence should be interpreted as evidence of some sort of violence or of a fire". On the other hand he categorically says: "The Harappan Civilization does not derive from the Amrian. Harappan modes are intrusive at Amri". The same picture we saw at Kot Diji. However, Casal gives precedence to Mohenjodaro over Harappa and significantly remarks: "Lothal must have been founded later than the towns of Sind and Punjab.....the foundation of Lothal in Kathiawar must be ascribed to the time of Amri III B, which thus represents the moment when the Harappan Civilization attains a climax". Sir Mortimer Wheeler's excavation at Harappa has given us the materials of the earliest levels at that site. But the earlier levels at Mohenjodaro still remain unknown. If the materials of 1950 excavation were published, we could get definite idea of the Intermediate stage, when the granary was built, and also what lay below it? However, now it is clear that the origin of the Mohenjodaro Civilization has to be sought by deep digging at this site. That is a responsibility which the Government of Pakistan owes to the scholars of the world. Meanwhile is it not possible to surmise that small bronze age communities developed at different places in the valley of the Indus probably as a result of western influence? In course of time one such community at Mohenjodaro developed its material culture and gradually expanded its influence in the neighbouring areas. Later Mohenjodarians forged ahead politically and dominated the entire valley of the Indus and even beyond in Kathiawar. This is just a surmise. Leaving aside this, we can build a chronological chart as follows:

	<i>Anjira</i>	<i>Kot Diji</i>	<i>Amri</i>	<i>Harappan</i>
Age of Stone	Periods I & II	
Age of Metals	{ Period III Period IV	Kot Diji (a) (early)		
		Kot Diji (b) & (c) (late)	Amri I (A-C)	Harappan?
		Kot Diji (Harappan contact)	Amri I D & II	Harappan

A. H. Dani.

7. Dr. F. A. KHAN — *The Indus Valley and Early Iran*.
Memoir No. 4 of the Department of Archaeology and
Museums, Pakistan. Karachi. 1964. PP. 104. plates 49.
Maps 4 and figures 11. Price Rs. 15.00.

Ever since the dawn of human migrations and the advent of international trade and commerce, Iran has been on the crossroads of civilizations. Poverty-stricken communities around the Caspian moved westwards to Anatolia and onwards to Europe. In the days of great urban civilizations of the Indus and Tigris-Euphrates Valley the Iranian plateau served as a bridge between Mesopotamia and the Land of the Indus. The rich and flourishing trade connecting the above-noted civilizations was carried on both through the Persian Gulf and land routes across the Iranian plateau. Very often this commercial intercourse was accomplished through entrepôts in the Gulf such as Behrain (Sumerian Dilmun) and several others along the coast and through Northern Iran. It was, therefore, but natural that Sumerian, Iranian and Harappan merchants exchanged not only goods, but also ideas and traditions etc. Thus it was obvious that this commercial pursuit should result in a natural influence of arts and crafts of these regions.

In this book, which is mainly based on Dr. Khan's thesis (submitted to the University of London, 1953) the author has showed most remarkably through specimens of arts and crafts how Iran and West Pakistan were linked to, and influenced by, each other in ceramics, jewellery, cosmetics, stone vessels and terracottas etc.

First Chapter of the book is devoted to the geographical background, and the routes connecting the two regions. Dr. Khan has illustrated here (Map 2) how caravans moved through Diyala region (Mesopotamia) Kirman Shah, Hamadan, Ray, Hissar-Damghan and Seistan into Baluchistan and the Indus Valley across Northern Iran; Diyala-Hamadan-Sialk-Kirman-Bampur; Susa-Tell Bakun and Bampur into Baluchistan and the Indus Valley across Southern Iran.

The second chapter, illustrating cultural relationship between the two regions, shows how Bampur and Baluchistan served as intermediaries between North East and South West Iran on the one hand and the Indus Valley on the other, as evidenced through arts and crafts of these regions. Third chapter deals with the recently excavated sites of Kot-Diji and Amri in Khairpur and Sind areas. Although, hardly a few specimens from these two sites can be compared with Iranian stuff, a brief note on them was perhaps of some significance for the study of the protohistory in the Indus region.

However, for fair and critical angles, one misses certain factors in this book. While several objects in the plates have not been referred to in the text, and some plates are unnecessarily included, a few others should have been there for the convenience of the readers. Map No. 1 shows wrong names for the rivers in Mesopotamia, but that, however, may be a cartographic mistake, although such details require careful attention, while the book is in preparation. The most wanted element for such an accomplished work, however,

would be a good concluding chapter, which is not there. Such a chapter would obviously be dealing mainly with important factors, such as the volume of trade links, its significance and above all dating of the Indus Civilization in the light of fresh discoveries and informations. At the moment, it is a general tendency (as pointed out by Wheeler in his preface) to lower the dating of the Indus Civilization on the bases of C14 tests, the stratigraphy at Kot-Diji and the presence of Kot-Diji Culture pottery in the pre-Harappan levels at other sites in the Indus region.

It is not likely that the Harappan metropolis like Mohenjodaro did not exist at the time when Kot-Dijians flourished (as suggested by Wheeler in his preface) but even if that be so, there is evidence of commercial link between Harappans, Iranians and Sumerians in Early Dynastic period of Mesopotamia (as noted on pages 27, 28, 31, 32, 37, 38, 39 and 41). Moreover strong Indus Valley influence on Mesopotamian stone vessels is evidenced at Khafajah and Tell Agrab in Early Dynastic II and III periods of Mesopotamia¹. This suggests that the Indus Civilization had its links already established with Mesopotamia in the 1st half of the third millennium B.C. As a civilization would usually require a couple of centuries to attain status and position in international trade links, the beginning of Harappan civilization may therefore be proposed at least Early Dynastic I (c. 2900 B.C.) if not earlier. The evidence cited above and the one collected through Dr. George F. Dales boring in 1965 (and the recent boring in 1966) would suggest a much longer life for Mohenjodaro and Indus Civilization.

Sir Mortimer Wheeler is therefore quite correct in admitting that his earlier bracket (2500-1500) was "excessively conservative" (Preface XIII) and that the C14 tests so far made for Indus Valley sites are inadequate and the results yielded through them are insecure (Preface XII).

On the whole, however, a book of this kind was needed for a long time, specially in the days when the destiny of Iran and Pakistan are being recognised as Common (R.C.D.), and we are culturally drifting closer to each other, for which Dr. F. A. Khan, deserves full credit.

F. A. Durrani.

—:S:—

(1) F.A. DURRANI, "Stone Vases as evidence of connection between Mesopotamia and the Indus - Valley" in *Ancient Pakistan*, Vol. I, 1964 Pl. V, 1, P. 79-80, and Pl. II, 6a-b, P. 81-82.

3.

- 7

2

Central Archaeological Library,
NEW DELHI.

Call No.

Author—

Title— *Ancient Pottery*
Lot 2, 1965-66

Borrower No.	Date of Issue	Date of Return
<i>D. Mitra</i>	<i>16/5/68</i>	<i>24/11/68</i>